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=> d que l17
L3                STR
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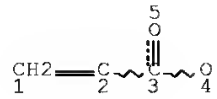

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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
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NUMBER OF NODES IS    5

STEREO ATTRIBUTES: NONE
L4                STR
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NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
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NUMBER OF NODES IS   13

STEREO ATTRIBUTES: NONE
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L8                STR
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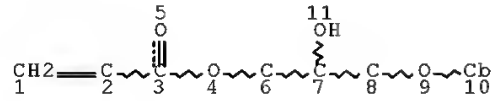

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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
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NUMBER OF NODES IS   11

STEREO ATTRIBUTES: NONE
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L11           119 SEA FILE=REGISTRY ABB=ON  PLU=ON  L6 NOT L10
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L14           42 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L10
L15           41 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L13
L16           82 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L14 OR L15
L17           62 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L16 AND (1840-2003)/PRY,AY
                 ,PY


=> d l17 1-62 ibib ed abs hitstr hitind

L17  ANSWER 1 OF 62  HCAPLUS  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:         2005:13376  HCAPLUS  Full-text
DOCUMENT NUMBER:          142:76325
TITLE:                    Maleimides, their compositions, sealants, and
                          display cells sealed with them
INVENTOR(S):              Asano, Toyofumi; Kametani, Hideteru; Koyanagi,
                          Takao; Imaizumi, Masahiro; Ochi, Naoyuki; Kudo,
                          Masaru; Nishihara, Eiichi
PATENT ASSIGNEE(S):       Nippon Kayaku Co., Ltd., Japan
SOURCE:                   Jpn. Kokai Tokkyo Koho, 30 pp.
                          CODEN: JKXXAF
DOCUMENT TYPE:            Patent
LANGUAGE:                 Japanese
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
     ----------------     ----   --------    --------------------    --------
     JP 2005002015         A     20050106    JP 2003-165578          20030610
                                                      <--
PRIORITY APPLN. INFO.:                       JP 2003-165578          20030610
                                                      <--

ED   Entered STN:  07 Jan 2005
AB   Title compns., useful for sealing liquid crystal display cells, organic
     electroluminescent display cells, etc., contain maleimides having structures
     (R1O)mC6H4SO2C6H4(OR2)n (R1, R2 = C2-6 hydrocarbylene; m, n = 0-5).  The
     compns. show good processability, adhesive strength, low-temperature
     curability, long pot life, and reduced dissoln. of components to liquid
     crystals.  Thus, Q(CH2)5CO2C2H4O-p-C6H4SO2-p- C6H4OC2H4O2C(CH2)5Q (Q =
     maleimido) 40, resorcin diglycidyl ether oligomer 20, resorcin diglycidyl
     ether acrylate 70, IDH-S (dihydrazide) 5, coupling agent 0.6, core-shell
     rubber particles 7, alumina particles 30, and ion scavenger 1 part were mixed
     to give a liquid crystal sealant.
IT   815574-92-6P 815574-95-9P
        (manufacture of maleimides for sealants for display cells)
RN   815574-92-6  HCAPLUS
CN   1,3-Benzenedicarboxylic acid, dihydrazide, polymer with
     2,2'-[1,3-phenylenebis(oxymethylene)]bis[oxirane],
     2,2'-[1,3-phenylenebis(oxymethylene)]bis[oxirane] homopolymer
     2-propenoate and sulfonylbis(4,1-phenyleneoxy-2,1-ethanediyl)
     bis(2,5-dihydro-2,5-dioxo-1H-pyrrole-1-hexanoate) (9CI)  (CA INDEX
     NAME)

     CM   1

     CRN  813468-10-9
     CMF  C36 H40 N2 O12 S
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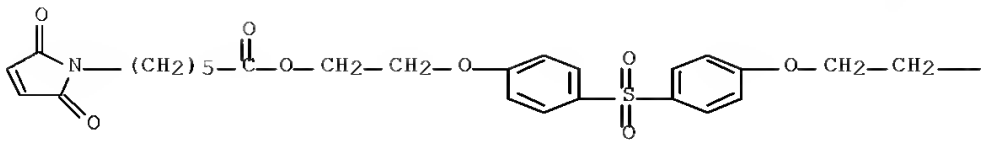
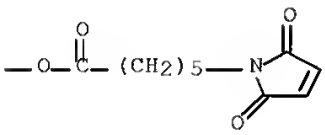
PAGE 1-A



PAGE 1-B



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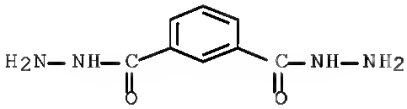
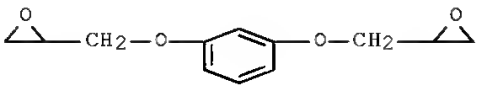
CRN 2760-98-7
CMF C8 H10 N4 O2



CM 3

CRN 101-90-6
CMF C12 H14 O4



CM 4

CRN 117925-72-1
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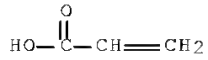
CM 5

CRN 79-10-7

CMF C3 H4 O2

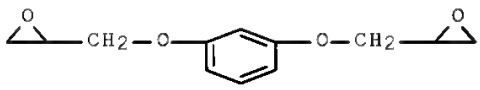


CM 6

CRN 29563-13-1
CMF (C12 H14 O4)x
CCI PMS

CM 7

CRN 101-90-6
CMF C12 H14 O4

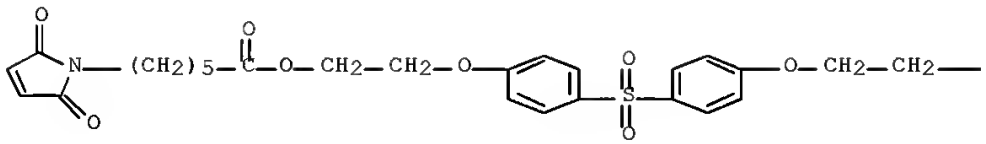


RN 815574-95-9 HCAPLUS
CN 1,3-Benzenedicarboxylic acid, dihydrazide, polymer with 2,2'-[1,3-phenylenebis(oxymethylene)]bis[oxirane] homopolymer 2-propenoate, sulfonylbis(4,1-phenyleneoxy-2,1-ethanediyl) bis(2,5-dihydro-2,5-dioxo-1H-pyrrole-1-hexanoate) and 2,2'-[sulfonylbis(4,1-phenyleneoxy-2,1-ethanediyloxymethylene)]bis[oxirane] (9CI) (CA INDEX NAME)

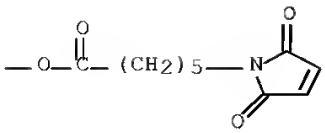
CM 1

CRN 813468-10-9
CMF C36 H40 N2 O12 S

PAGE 1-A



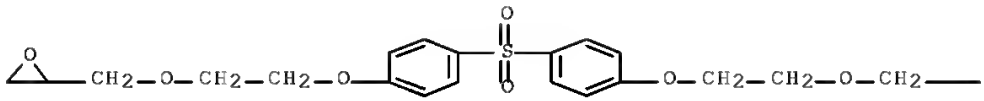
PAGE 1-B



CM 2

CRN 133831-00-2
CMF C22 H26 O8 S

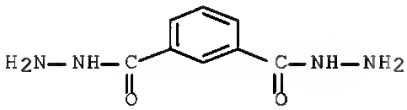
PAGE 1-A



PAGE 1-B

CM 3

CRN 2760-98-7
CMF C8 H10 N4 O2



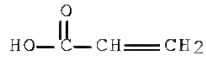
CM 4

CRN 117925-72-1
CMF (C12 H14 O4)x . x C3 H4 O2

CM 5

CRN 79-10-7

CMF C3 H4 O2

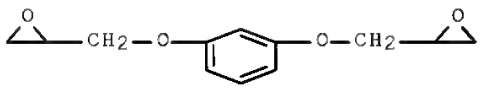


CM 6

CRN 29563-13-1
CMF (C12 H14 O4)x
CCI PMS

CM 7

CRN 101-90-6
CMF C12 H14 O4



IC ICM C07D207-452
ICS C08F022-40; C08G059-14; C08G059-50; G02F001-1339; H05B033-04; H05B033-14
CC 42-11 (Coatings, Inks, and Related Products)
Section cross-reference(s): 27, 74
IT **815574-92-6P** 815574-94-8P **815574-95-9P**
(manufacture of maleimides for sealants for display cells)

L17 ANSWER 2 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:1037369 HCAPLUS Full-text
DOCUMENT NUMBER: 142:24749
TITLE: Sealants for liquid crystals and liquid-crystal display cells therefrom
INVENTOR(S): Ochi, Naoyuki; Asano, Toyofumi; Imaizumi, Masahiro; Kudo, Masaru; Nishihara, Eiichi; Koyanagi, Hiroo; Ichimura, Sumio; Hirano, Masahiro
PATENT ASSIGNEE(S): Nippon Kayaku Kabushiki Kaisha, Japan
SOURCE: PCT Int. Appl., 26 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004104683	A1	20041202	WO 2004-JP6646 <--	20040518

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,

GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP,
KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD,
SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,
VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ,
DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL,
PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG

CA 2525178	A1	20041202	CA 2004-2525178 <--	20040518
EP 1630594	A1	20060301	EP 2004-733630 <--	20040518
R: CH, DE, FR, GB, LI				
CN 1791834	A	20060621	CN 2004-80013958 <--	20040518
JP 3921493	B2	20070530	JP 2005-506333 <--	20040518
US 2007020405	A1	20070125	US 2005-555898 <--	20051223
PRIORITY APPLN. INFO.:			JP 2003-142805 A <--	20030521
			JP 2003-160513 A <--	20030605
			WO 2004-JP6646 W	20040518

ED Entered STN: 03 Dec 2004

AB Title sealants, which will not contaminate liquid crystals and have high adhesion, contain radiation-curable QOY[OCH2C(OH)R1CH2OY]nOQ (Q = CH2:CR3COOCH2C(OH)R1CH2; R1, R3 = Me or H; Y = C6H6-2-mR2m, R2 = H, halogen, OH, C1-10 linear, branched, or cyclic alkyl, C1-10 alkoxy, m = 1-4; n = 0-20), photochem. polymerization initiators, and ≤3-μm inorg. fillers. A sealant containing poly(resorcinol diglycidyl ether) acrylate, EBPS 300, Adeka Optomer N 1414, KBM 603, IDH-S, 1.0 μm Al2O3, and Paraloid EXL 2655 particles showed an adhesion (on glass plates) 70 MPa and low contamination to liquid crystals after curing by UV radiation and heating at 120° over 1 h.

IT **118023-89-5P**
(resorcinol diglycidyl ether resin acrylate-containing UV-curable sealants with low contamination to liquid crystals)

RN 118023-89-5 HCAPLUS

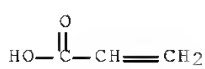
CN Oxirane, 2,2'-[1,3-phenylenebis(oxymethylene)]bis-, homopolymer, 2-propenoate, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 117925-72-1
CMF (C12 H14 O4)x . x C3 H4 O2

CM 2

CRN 79-10-7
CMF C3 H4 O2

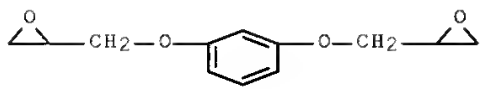


CM 3

CRN 29563-13-1
CMF (C12 H14 O4)x
CCI PMS

CM 4

CRN 101-90-6
CMF C12 H14 O4



IC ICM G02F001-1339
ICS C09K003-10; C08F299-02
CC 42-11 (Coatings, Inks, and Related Products)
Section cross-reference(s): 74
IT **118023-89-5P** 800365-90-6P, Bisphenol S diglycidyl ether-isophthalic dihydrazide copolymer 800365-91-7P, Bisphenol S diglycidyl ether-Amicure VDH copolymer
(resorcinol diglycidyl ether resin acrylate-containing UV-curable sealants with low contamination to liquid crystals)
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 3 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:1014326 HCAPLUS Full-text
DOCUMENT NUMBER: 142:7602
TITLE: Epoxy-containing polybranched compounds and their curable compositions useful for solder resists of printed circuit boards
INVENTOR(S): Miyabe, Hidekazu
PATENT ASSIGNEE(S): Taiyo Ink Mfg. Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 20 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004331768	A	20041125	JP 2003-128117 <--	20030506
PRIORITY APPLN. INFO.:			JP 2003-128117 <--	20030506

ED Entered STN: 25 Nov 2004
AB The compds. having terminal epoxy groups are manufactured by reaction of (A) epoxy compds. having ≥2 epoxy groups and (B) phenol compds. having ≥2 (or ≥3

when A have 2 epoxy groups) phenolic OH. Thus, a composition containing a reaction product of HP 4032D (naphthalene-based epoxy resin) and phloroglucinol 161.3, HF 1 (phenol novolak resin) 9.6, and Curezol 2E4MZ (2-ethyl-4-methylimidazole) 0.2 part was applied on an Al foil and cured to give a coating with good bending crack resistance, tensile modulus (JIS K 7127) 2286 MPa, and Tg 142.8°.

IT **798542-10-6P**, Epiclon N 695 ester with acrylic acid and tetrahydrophthalic anhydride, polymers with dipentaerythritol hexaacrylate, and HP 4032D, and triphenolmethane
(curable compns. containing epoxy-containing polybranched compds. useful for solder resists of printed circuit boards)

RN 798542-10-6 HCAPLUS

CN 2-Propenoic acid, 2-[[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with Epiclon N 695 hydrogen 4-cyclohexene-1,2-dicarboxylate 2-propenoate, methylidynetris[phenol] and 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis[oxirane] (9CI) (CA INDEX NAME)

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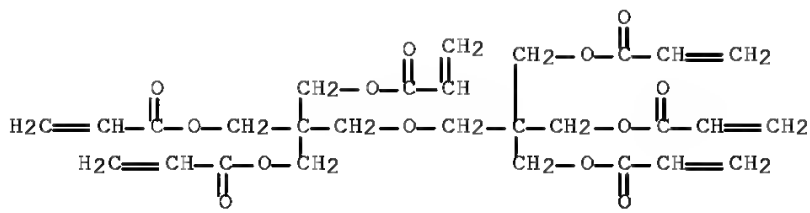
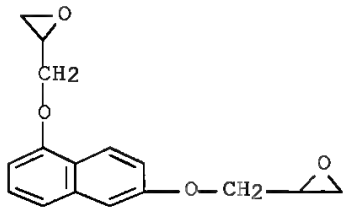
CRN 29570-58-9
CMF C28 H34 O13



CM 2

CRN 27610-48-6
CMF C16 H16 O4



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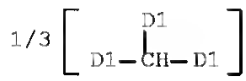
CRN 25639-41-2
CMF C19 H16 O3

CCI IDS

D1—OH



CM 4

CRN 359403-20-6
CMF C8 H10 O4 . x C3 H4 O2 . x Unspecified

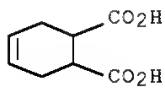
CM 5

CRN 91594-04-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

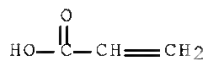
CM 6

CRN 88-98-2
CMF C8 H10 O4



CM 7

CRN 79-10-7
CMF C3 H4 O2



IC ICM C08G059-14
ICS C08G059-40; H05K003-28

CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 76
IT 9016-83-5DP, Cresol-formaldehyde copolymer, glycidyl ethers, ester with acrylic acid and tetrahydrophthalic anhydride, reaction products with dipentaerythritol hexaacrylate and epoxy resin 797817-53-9P **798542-10-6P**, Epiclon N 695 ester with acrylic acid and tetrahydrophthalic anhydride, polymers with dipentaerythritol hexaacrylate, and HP 4032D, and triphenolmethane
(curable compns. containing epoxy-containing polybranched compds. useful for solder resists of printed circuit boards)

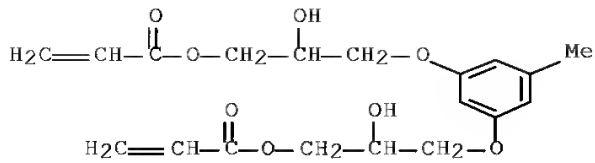
L17 ANSWER 4 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:945479 HCAPLUS Full-text
DOCUMENT NUMBER: 139:401393
TITLE: Acrylic epoxy-based polymerizable compounds, their compositions, and their cured products with good processability and smooth surface for optical waveguides
INVENTOR(S): Ozaki, Toru; Koyanagi, Takao; Yokoshima, Minoru
PATENT ASSIGNEE(S): Nippon Kayaku Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003342351	A	20031203	JP 2002-157326 <--	20020530
JP 3904976	B2	20070411		
PRIORITY APPLN. INFO.:			JP 2002-157326 <--	20020530

ED Entered STN: 04 Dec 2003
AB The invention relates to the polymerizable compds. of (A) reaction products of resorcin-type diglycidyl ethers and (meth)acrylic acid or maleimido-containing monocarboxylic acids or (B) reaction products of A and polybasic acid anhydrides. The compns. show good transparency and controllability of their refractive index.
IT **627080-44-8P**
(clad; resorcin-type acrylic epoxy resins with good processability and smooth surface for optical waveguides)
RN 627080-44-8 HCAPLUS
CN 2-Propenoic acid, (5-methyl-1,3-phenylene)bis[oxy(2-hydroxy-3,1-propanediyl)] ester, polymer with 3,3,4,4,5,5,6,6-octafluoro-1,8-octanediyl di-2-propenoate (9CI) (CA INDEX NAME)

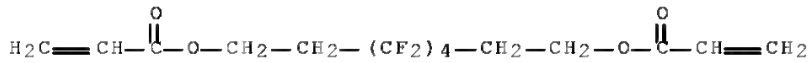
CM 1

CRN 627080-41-5
CMF C19 H24 O8

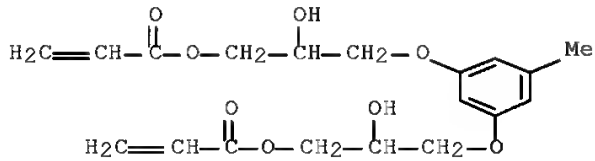


CM 2

CRN 118643-50-8
CMF C14 H14 F8 O4



IT **627080-41-5P**
(resorcin-type acrylic epoxy resins with good processability and smooth surface for optical waveguides)
RN 627080-41-5 HCAPLUS
CN 2-Propenoic acid, (5-methyl-1,3-phenylene)bis[oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)



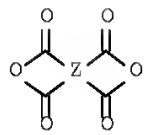
IC ICM C08G059-14
ICS C08F290-06
CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 38
IT **627080-44-8P**
(clad; resorcin-type acrylic epoxy resins with good processability and smooth surface for optical waveguides)
IT **627080-41-5P** 627080-42-6P
(resorcin-type acrylic epoxy resins with good processability and smooth surface for optical waveguides)

L17 ANSWER 5 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:479014 HCAPLUS Full-text
DOCUMENT NUMBER: 139:60428
TITLE: Carboxyl group-containing photopolymerizable unsaturated resins, their preparation, and their alkali-soluble radiation-sensitive resin

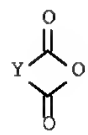
compositions
INVENTOR(S): Fujii, Satoru; Yanagihara, Yoshihisa; Kitano, Kei
PATENT ASSIGNEE(S): Nagase Chemtex Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003176344	A	20030624	JP 2001-377511	20011211
			<--	
JP 3893587	B2	20070314		
PRIORITY APPLN. INFO.:			JP 2001-377511	20011211
			<--	

ED Entered STN: 24 Jun 2003
GI



I



II

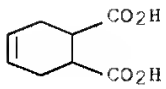
AB In the preparation, diepoxides EpCH2OAOCH2Ep [Ep = epoxy group; A = (substituted) biphenylene which may be bonded via CO, SO2, C(CF3)2, SiMe2, CH2, CMe2, O, or naphthylene] are esterified with CH2:CR1CO2H (R1 = H, Me) to give (meth)acrylate derivs. CH2:CR1CO2CH2CH(OH)CH2OAOCH2CH(OH)CH2O2CR1:CH2, reacted with tetracarboxylic dianhydride (I; Z = acid anhydride group-removed residue of tetracarboxylic dianhydride) and subsequently with dicarboxylic acid anhydrides (II; Y = acid anhydride group-removed residue of dicarboxylic dianhydride) at molar ratio (8):(7) = 1:99-65:35 to give the photopolymerizable unsatd. resins HO2CYCO2[XO2CZ(CO2H)2CO2]nXO2CYCO2H (X = dihydroxy-removed residue of the (meth)acrylate derivs., = 1-20 integer) with Mn ≥1000. The compns. contain (A) the resins, (B) epoxides, (C) photopolymn. initiators, and optionally (D) ≥1 photopolymerizable monomers and/or oligomers ≤50 parts per 100 parts A. The compns. give cured films having good heat resistance, transparency, adhesion strength, and chemical resistance, etc., and are useful for protection layers or interlayer dielecs., color filters, LCD, IC< solid image pickup devices, solder resist, color resist binders, etc.

IT **546084-90-6P**, Benzophenonetetracarboxylic dianhydride-Epiclon HP 4032D acrylate copolymer, half ester with 1,2,3,6-tetrahydrophthalic anhydride
(preparation of HO2C-terminated aromatic epoxy (meth)acrylate-derived photopolymerizable unsatd. polyesters for neg. photoresists and color filters)

RN 546084-90-6 HCAPLUS
CN 1,3-Isobenzofurandione, 5,5'-carbonylbis-, polymer with 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis[oxirane] homopolymer 2-propenoate, hydrogen 4-cyclohexene-1,2-dicarboxylate (9CI) (CA INDEX NAME)

CM 1

CRN 88-98-2
CMF C8 H10 O4

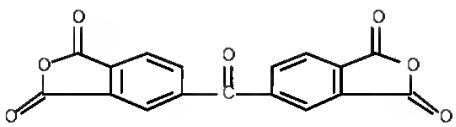


CM 2

CRN 546084-89-3
CMF (C17 H6 O7 . (C16 H16 O4)x . x C3 H4 O2)x
CCI PMS

CM 3

CRN 2421-28-5
CMF C17 H6 O7

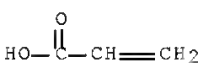


CM 4

CRN 162260-66-4
CMF (C16 H16 O4)x . x C3 H4 O2

CM 5

CRN 79-10-7
CMF C3 H4 O2



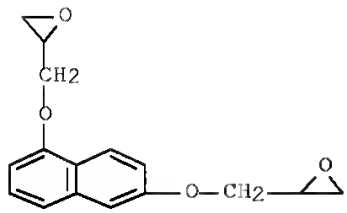
CM 6

CRN 131406-13-8
CMF (C16 H16 O4)x

CCI PMS

CM 7

CRN 27610-48-6
CMF C16 H16 O4



IC ICM C08G063-676
ICS C08F290-06; C08G059-42; G03F007-004; G03F007-027
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
IT 546084-88-2P, Benzophenonetetracarboxylic dianhydride-Epikote YX 4000 acrylate copolymer, half ester with 1,2,3,6-tetrahydrophthalic anhydride **546084-90-6P**, Benzophenonetetracarboxylic dianhydride-Epiclon HP 4032D acrylate copolymer, half ester with 1,2,3,6-tetrahydrophthalic anhydride
(preparation of HO2C-terminated aromatic epoxy (meth)acrylate-derived photopolymerizable unsatd. polyesters for neg. photoresists and color filters)

L17 ANSWER 6 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:239873 HCAPLUS Full-text
DOCUMENT NUMBER: 138:239207
TITLE: Alkali-soluble unsaturated polymers, their photocurable compositions, and manufacture of the polymers
INVENTOR(S): Fujii, Satoru; Yanagihara, Yoshinao; Hosomi, Tetsuya; Kitano, Kei
PATENT ASSIGNEE(S): Nagase Chemtex Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 21 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003089716	A	20030328	JP 2002-41864 <--	20020219
PRIORITY APPLN. INFO.:			JP 2001-44212 <--	A 20010220
			JP 2001-212351 <--	A 20010712

ED Entered STN: 28 Mar 2003

AB The polymers contain HO2CVCO2X[O2CZ(CO2)2CO2X]a[O2CVCO2WO2CVCO2X[O2CZ(CO2H)2CO2X]b]nO2CVCO2H [X = (CH2:CR1CO2CH2)CHCH2OAOCH2CH(CH2O2CCR1:CH2); R1 = H, Me; A = P, Q, S; R2, R3 = H, C1-5 alkyl, Ph, halo; R4 = H, OH, C1-5 alkyl; B = CO, SO2, C(CF3)2, SiMe2, CH2, CMe2, O, direct bond; a, b, n = 0-20; V = Y or Z; Y = carboxylic anhydride residue; Z = carboxylic dianhydride residue; W = groups derived from polyfunctional epoxy compds.]. Thus, 9,9-di(4-glycidyloxyphenyl)fluorene diacrylate was successively reacted with benzophenonetetracarboxylic acid dianhydride, 1,2,3,6- tetrahydrophthalic anhydride, and 9,9-di(4-glycidyloxyphenyl)fluorene to give a copolymer, 100 parts of which was mixed with 20 parts 2,3,4,4'-tetrahydroxybenzophenone 1,2-naphthoquinonediazido-5- sulfonate, applied on a silicon substrate, irradiated with radiation via a mask having a predetd. pattern, developed with tetramethylammonium hydroxyde solution, washed with water, and dried to give a pattern showing good heat and chemical resistance and transparency.

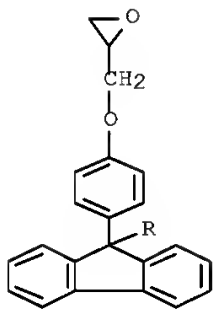
IT **501426-29-5P**, Benzophenonetetracarboxylic acid dianhydride-9,9-di(4-glycidyloxyphenyl)fluorene-Epiclon HP 4032D acrylate-1,2,3,6-tetrahydrophthalic anhydride copolymer
(manufacture of alkali-soluble unsatd. polymers for photoresists with good heat and chemical resistance for semiconductor devices)

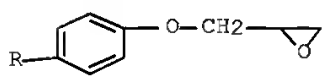
RN 501426-29-5 HCAPLUS

CN 1,3-Isobenzofurandione, 3a,4,7,7a-tetrahydro-, polymer with 5,5'-carbonylbis[1,3-isobenzofurandione], 2,2'-[9H-fluoren-9-ylidenebis(4,1-phenyleneoxymethylene)]bis[oxirane] and 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis[oxirane] homopolymer 2-propenoate (9CI) (CA INDEX NAME)

CM 1

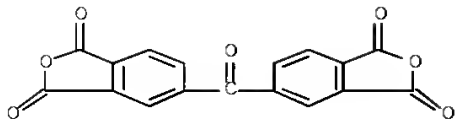
CRN 47758-37-2
CMF C31 H26 O4





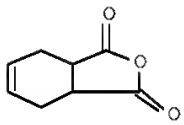
CM 2

CRN 2421-28-5
CMF C17 H6 O7



CM 3

CRN 85-43-8
CMF C8 H8 O3

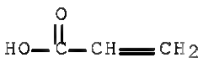


CM 4

CRN 162260-66-4
CMF (C16 H16 O4)x . x C3 H4 O2

CM 5

CRN 79-10-7
CMF C3 H4 O2

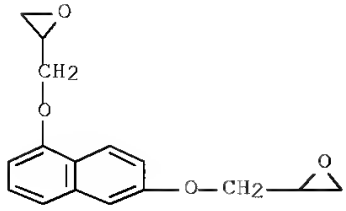


CM 6

CRN 131406-13-8
CMF (C16 H16 O4)x
CCI PMS

CM 7

CRN 27610-48-6
CMF C16 H16 O4



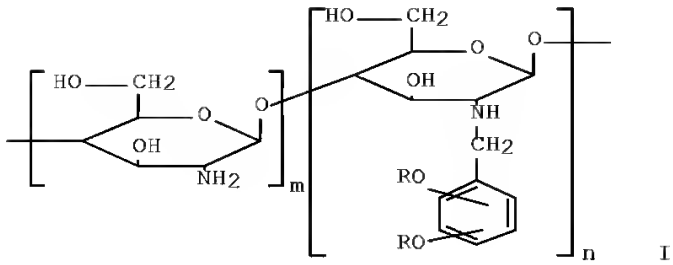
IC ICM C08G059-17
ICS C08F290-14; G03F007-004; G03F007-023; G03F007-027
CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 74, 76
IT 501417-86-3P, Benzophenonetetracarboxylic acid dianhydride-9,9-di(4-glycidyloxyphenyl)fluorene-9,9-di(4-glycidyloxyphenyl)fluorene diacrylate copolymer 501417-87-4P 501417-88-5P 501426-28-4P, Benzophenonetetracarboxylic acid dianhydride-9,9-di(4-glycidyloxyphenyl)fluorene-Epikote YX 4000 acrylate-1,2,3,6-tetrahydrophthalic anhydride copolymer **501426-29-5P**, Benzophenonetetracarboxylic acid dianhydride-9,9-di(4-glycidyloxyphenyl)fluorene-Epiclon HP 4032D acrylate-1,2,3,6-tetrahydrophthalic anhydride copolymer
(manufacture of alkali-soluble unsatd. polymers for photoresists with good heat and chemical resistance for semiconductor devices)

L17 ANSWER 7 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:606394 HCAPLUS Full-text
DOCUMENT NUMBER: 137:171300
TITLE: Photocurable N-alkylchitosan derivatives, manufacture thereof, and photocured polymers therefrom
INVENTOR(S): Omura, Yoshihiko; Renbutsu, Akiko; Saimoto, Hiroyuki; Shigemasa, Yoshihiro
PATENT ASSIGNEE(S): Daishin Chemical Co., Ltd., Japan; Omura Paint K. K.
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002226503	A	20020814	JP 2001-22194 <--	20010130

PRIORITY APPLN. INFO.: JP 2001-22194 <-- 20010130

ED Entered STN: 14 Aug 2002
GI



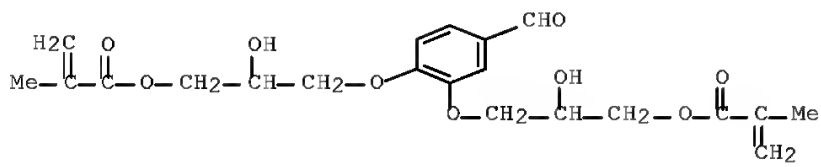
I

AB The N-alkylchitosan derivs. are I [R = (meth)acryloyl-bearing acyclic unsatd. hydrocarbyl; m + n = 1] and prepared by reductive benzylation of chitosan with HOCC6H3(OR)2 [R = same definition as above]. Photocured I are useful for contact lenses, dental materials, primers for electroless plating, etc. Thus, chitosan was reacted with 3,4-bis(2-hydroxy-3-methacryloyloxypropoxy)benzaldehyde for benzylation degree (n) 0.1 and photocured to give a film showing Pd adsorption 0.46 mg/20-mg film in 3-min immersion in PdCl2 bath (pH 1.1) under shaking.

IT **446023-06-9P**
(manufacture of photocurable N-alkylchitosan derivs. for plating primers and pharmaceutical uses)

RN 446023-06-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (4-formyl-1,2-phenylene)bis[oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)



IC ICM C08B037-08
ICS C08F002-48; C08F299-00

CC 44-5 (Industrial Carbohydrates)
Section cross-reference(s): 56, 63

IT **446023-06-9P**
(manufacture of photocurable N-alkylchitosan derivs. for plating primers and pharmaceutical uses)

L17 ANSWER 8 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:347394 HCAPLUS Full-text

DOCUMENT NUMBER: 136:361629

TITLE: (Meth)acrylic acid thioesters, their compositions, optical parts manufactured from them with high efficiency, and dimercapto compounds

INVENTOR(S): Okuma, Tadashi; Imai, Masao; Otsuji, Atsuo

PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 89 pp.
CODEN: JKXXAF

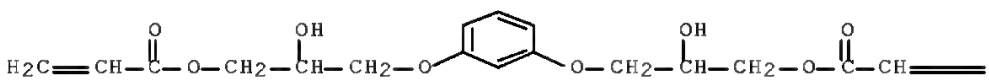
DOCUMENT TYPE: Patent

LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002128827	A	20020509	JP 2000-331186 <--	20001030
PRIORITY APPLN. INFO.:			JP 2000-331186 <--	20001030

OTHER SOURCE(S): MARPAT 136:361629
ED Entered STN: 09 May 2002
AB The thioesters, useful for lenses, optical recording media, liquid crystal cells, and optical fibers, are shown as R13CH2:CR12[SC:OCR14(:CH2)]Z2Q1Y1Q2Z1CH:CR9[SC:OCR11(:CH2)]CH2R10 (Q1 = R1-4-substituted phenylene; Q2 = R5-6-substituted phenylene; R1-8 = H, alkyl, alkoxy, nitro, halo; R9,12 = H, alkyl; R10,13 = S-containing substituent; R11,14 = H, Me; Y1 = single bond, CR15R16; R15,16 = H, alkyl, aryl, O, S, SO2; Z1,2 = O, S). Lenses manufactured by curing the thioesters show good transparency, impact resistance, and refractive index.
IT **126659-18-5P 422319-84-4P 422319-85-5P 422319-86-6P 422319-87-7P 422319-88-8P 422320-50-1P**
(acrylic acid thioester compns. for optical parts with high refractive index and impact resistance)
RN 126659-18-5 HCAPLUS
CN 2-Propenoic acid, 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

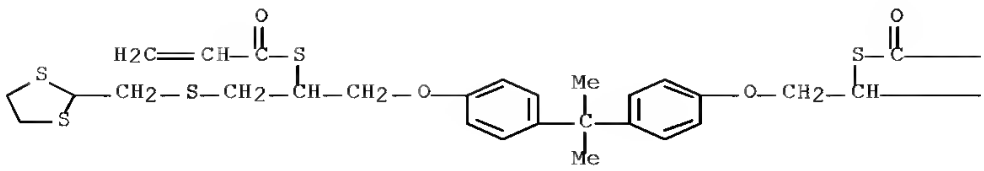
=CH2

RN 422319-84-4 HCAPLUS
CN 2-Propenoic acid, 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester, polymer with diethenylbenzene and S,S'-[(1-methylethylidene)bis[4,1-phenyleneoxy[1-[[(1,3-dithiolan-2-ylmethyl)thio]methyl]-2,1-ethanediyl]]] di-2-propenethioate (9CI) (CA INDEX NAME)

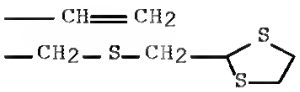
CM 1

CRN 422319-78-6
CMF C35 H44 O4 S8

PAGE 1-A



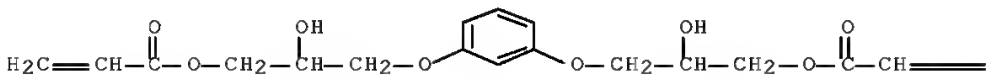
PAGE 1-B



CM 2

CRN 126659-18-5
CMF C18 H22 O8

PAGE 1-A



PAGE 1-B

CM 3

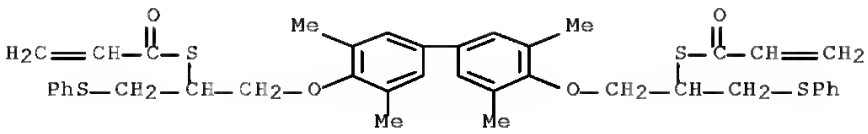
CRN 1321-74-0
CMF C10 H10
CCI IDS

2 [D1—CH═CH2]

RN 422319-85-5 HCAPLUS
CN 2-Propenoic acid, 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester, polymer with diethenylbenzene and S,S'-[(3,3',5,5'-tetramethyl[1,1'-biphenyl]-4,4'-diyl)bis[oxy[1-[(phenylthio)methyl]-2,1-ethanediyl]]] di-2-propenethioate (9CI) (CA INDEX NAME)

CM 1

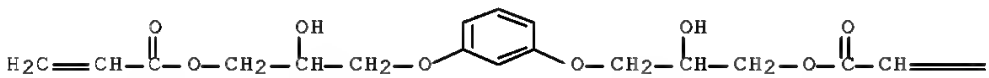
CRN 422319-77-5
CMF C40 H42 O4 S4



CM 2

CRN 126659-18-5
CMF C18 H22 O8

PAGE 1-A



PAGE 1-B

═CH2

CM 3

CRN 1321-74-0

CMF C10 H10
CCI IDS

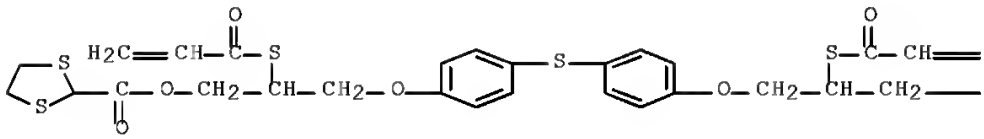
2 [D1—CH═CH2]

RN 422319-86-6 HCAPLUS
CN 1,3-Dithiolane-2-carboxylic acid, thiobis[4,1-phenyleneoxy[2-[(1-oxo-2-propenyl)thio]-3,1-propanediyl]] ester, polymer with diethenylbenzene and 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] di-2-propenoate (9CI) (CA INDEX NAME)

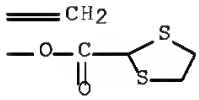
CM 1

CRN 422319-79-7
CMF C32 H34 O8 S7

PAGE 1-A



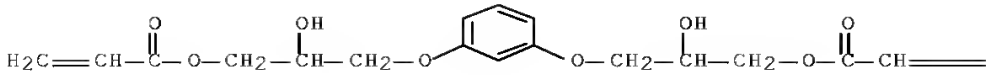
PAGE 1-B



CM 2

CRN 126659-18-5
CMF C18 H22 O8

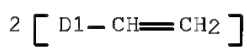
PAGE 1-A



PAGE 1-B

CM 3

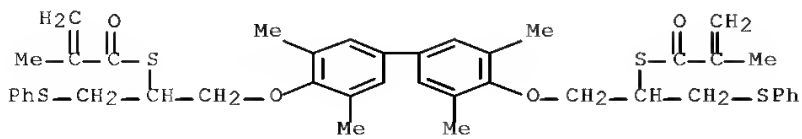
CRN 1321-74-0
CMF C10 H10
CCI IDS



RN 422319-87-7 HCAPLUS
CN 2-Propenoic acid, 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester, polymer with diethenylbenzene and S,S'-[(3,3',5,5'-tetramethyl[1,1'-biphenyl]-4,4'-diyl)bis[oxy[1-[(phenylthio)methyl]-2,1-ethanediyl]]] bis(2-methyl-2-propenethioate) (9CI) (CA INDEX NAME)

CM 1

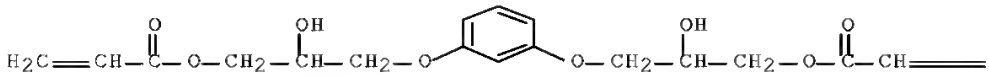
CRN 422319-80-0
CMF C42 H46 O4 S4



CM 2

CRN 126659-18-5
CMF C18 H22 O8

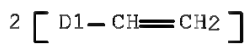
PAGE 1-A



PAGE 1-B

CM 3

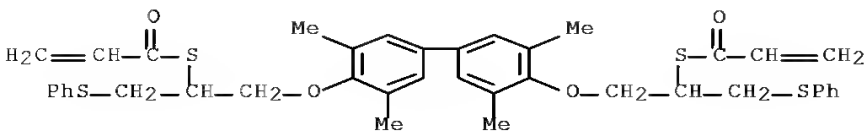
CRN 1321-74-0
CMF C10 H10
CCI IDS



RN 422319-88-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, oxydi-2,1-ethanediyl ester, polymer with 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] di-2-propenoate and S,S'-[(3,3',5,5'-tetramethyl[1,1'-biphenyl]-4,4'-diyl)bis[oxy[1-[(phenylthio)methyl]-2,1-ethanediyl]]] di-2-propenethioate (9CI) (CA INDEX NAME)

CM 1

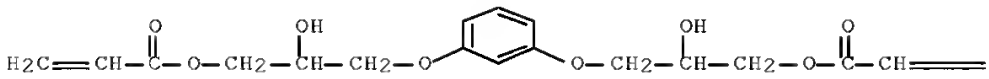
CRN 422319-77-5
CMF C40 H42 O4 S4



CM 2

CRN 126659-18-5
CMF C18 H22 O8

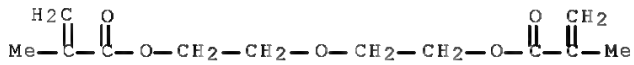
PAGE 1-A



PAGE 1-B

CM 3

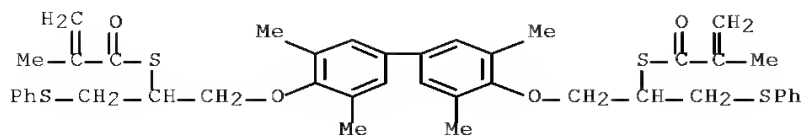
CRN 2358-84-1
CMF C12 H18 O5



RN 422320-50-1 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, phenyl ester, polymer with 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] di-2-propenoate and S,S'-[(3,3',5,5'-tetramethyl[1,1'-biphenyl]-4,4'-diyl)bis[oxy[1-[(phenylthio)methyl]-2,1-ethanediyl]]] bis(2-methyl-2-propenethioate) (9CI) (CA INDEX NAME)

CM 1

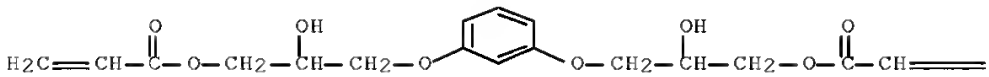
CRN 422319-80-0
CMF C42 H46 O4 S4



CM 2

CRN 126659-18-5
CMF C18 H22 O8

PAGE 1-A



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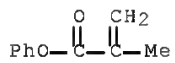
CM 3

CRN 2177-70-0
CMF C10 H10 O2



IC ICM C08F020-38
ICS C07C321-20; C07C327-22; C07C327-28; C07C327-32; G02B001-04
CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 38
IT **126659-18-5P** 422319-81-1P 422319-82-2P 422319-83-3P
422319-84-4P 422319-85-5P 422319-86-6P
422319-87-7P 422319-88-8P 422320-31-8P
422320-32-9P 422320-33-0P 422320-34-1P 422320-35-2P
422320-36-3P 422320-37-4P 422320-38-5P 422320-39-6P
422320-40-9P 422320-41-0P 422320-42-1P 422320-43-2P
422320-44-3P 422320-45-4P 422320-46-5P 422320-47-6P
422320-48-7P 422320-49-8P **422320-50-1P**
(acrylic acid thioester compns. for optical parts with high refractive index and impact resistance)

L17 ANSWER 9 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:344938 HCAPLUS Full-text
DOCUMENT NUMBER: 136:361627

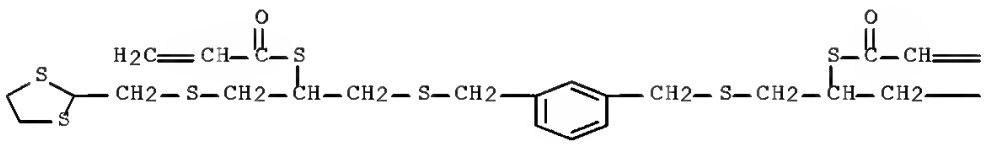
TITLE: (Meth)acrylic acid thioesters, their compositions, optical parts manufactured from them with high efficiency, and dimercapto compounds
INVENTOR(S): Okuma, Tadashi; Imai, Masao; Ootsuji, Atsuo
PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 55 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002128826	A	20020509	JP 2000-320895 <--	20001020
PRIORITY APPLN. INFO.:			JP 2000-320895 <--	20001020

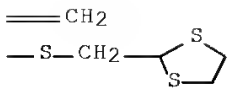
OTHER SOURCE(S): MARPAT 136:361627
ED Entered STN: 09 May 2002
AB The thioesters, useful for lenses, optical recording media, liquid crystal cells, and optical fibers, are shown as R9CH2:CR8[SC:OCR10(:CH2)]Z2CH2QCH2Z1CH:CR5[SC:OCR7(:CH2)]CH2R6 (Q = R1-4-substituted phenylene; R1-4 = H, alkyl, alkoxy, nitro, halo; R5,8 = H, alkyl; R6,9 = S-containing substituent; R7,10 = H, Me; Z1,2 = O, S). Lenses manufactured by curing the thioesters show good transparency, impact resistance, and refractive index.
IT **422311-65-7P 422311-66-8P 422311-67-9P**
422311-68-0P 422311-69-1P 422311-70-4P
(acrylic acid thioester compns. for optical parts with high refractive index and impact resistance)
RN 422311-65-7 HCAPLUS
CN 2-Propenoic acid, 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester, polymer with diethenylbenzene and S,S'-[1,3-phenylenebis[methylenethio[1-[[(1,3-dithiolan-2-ylmethyl)thio]methyl]-2,1-ethanediyl]]] di-2-propenethioate (9CI) (CA INDEX NAME)

CM 1

CRN 422311-58-8
CMF C28 H38 O2 S10



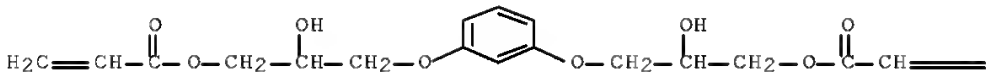
PAGE 1-B



CM 2

CRN 126659-18-5
CMF C18 H22 O8

PAGE 1-A



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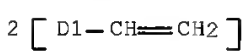
CM 3

CRN 1321-74-0
CMF C10 H10
CCI IDS

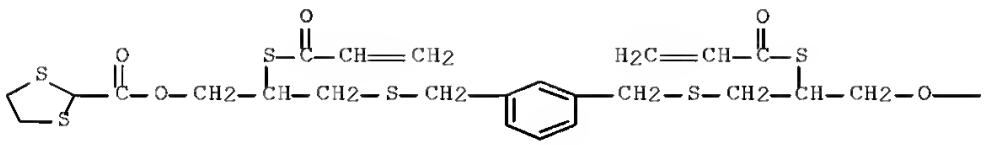


RN 422311-66-8 HCAPLUS
CN 1,3-Dithiolane-2-carboxylic acid, 1,3-phenylenebis[methylenethio[2-[(1-oxo-2-propenyl)thio]-3,1-propanediyl]] ester, polymer with diethenylbenzene and 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] di-2-propenoate (9CI) (CA INDEX NAME)

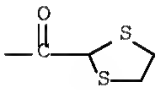
CM 1

CRN 422311-59-9
CMF C28 H34 O6 S8

PAGE 1-A



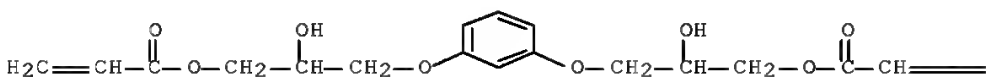
PAGE 1-B



CM 2

CRN 126659-18-5
CMF C18 H22 O8

PAGE 1-A



PAGE 1-B

CM 3

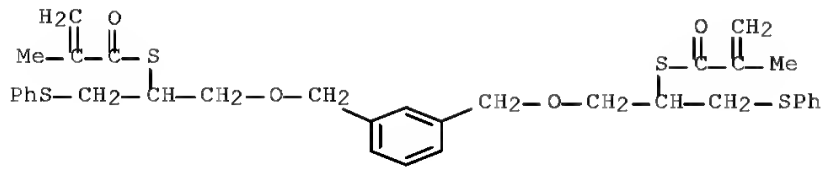
CRN 1321-74-0
CMF C10 H10
CCI IDS

2 [D1—CH═CH2]

RN 422311-67-9 HCAPLUS
CN 2-Propenoic acid, 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester, polymer with diethenylbenzene and S,S'-[1,3-phenylenebis[methyleneoxy[1-[(phenylthio)methyl]-2,1-ethanediyl]]] bis(2-methyl-2-propenethioate) (9CI) (CA INDEX NAME)

CM 1

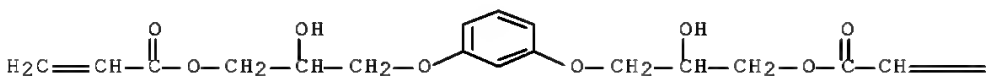
CRN 422311-60-2
CMF C34 H38 O4 S4



CM 2

CRN 126659-18-5
CMF C18 H22 O8

PAGE 1-A

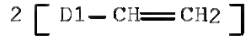


PAGE 1-B

═CH2

CM 3

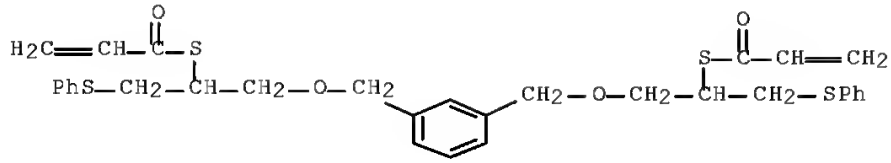
CRN 1321-74-0
CMF C10 H10
CCI IDS



RN 422311-68-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, oxydi-2,1-ethanediyl ester, polymer with S,S'-[1,3-phenylenebis[methyleneoxy[1-[(phenylthio)methyl]-2,1-ethanediyl]]] di-2-propenethioate and 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] di-2-propenoate (9CI) (CA INDEX NAME)

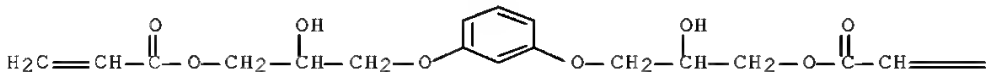
CM 1

CRN 422311-57-7
CMF C32 H34 O4 S4



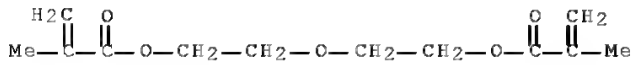
CM 2

CRN 126659-18-5
CMF C18 H22 O8



CM 3

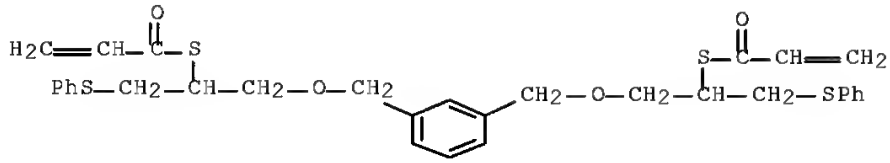
CRN 2358-84-1
CMF C12 H18 O5



RN 422311-69-1 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, phenyl ester, polymer with S,S'-[1,3-phenylenebis[methyleneoxy[1-[(phenylthio)methyl]-2,1-ethanediyl]]] di-2-propenethioate and 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] di-2-propenoate (9CI) (CA INDEX NAME)

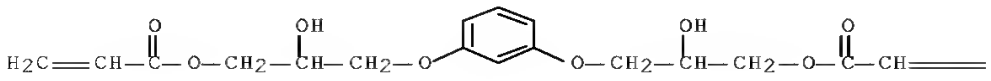
CM 1

CRN 422311-57-7
CMF C32 H34 O4 S4



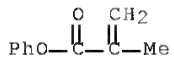
CM 2

CRN 126659-18-5
CMF C18 H22 O8



CM 3

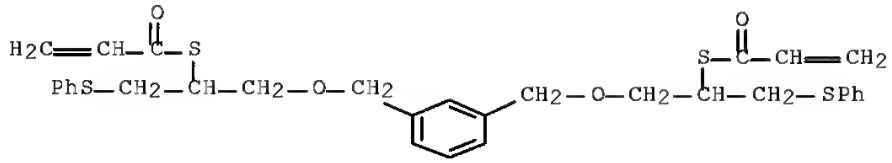
CRN 2177-70-0
CMF C10 H10 O2



RN 422311-70-4 HCAPLUS
CN 2-Propenoic acid, 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester, polymer with diethenylbenzene and S,S'-[1,3-phenylenebis[methyleneoxy[1-[(phenylthio)methyl]-2,1-ethanediyl]]] di-2-propenethioate (9CI) (CA INDEX NAME)

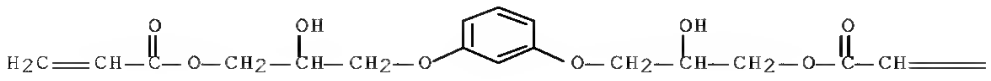
CM 1

CRN 422311-57-7
CMF C32 H34 O4 S4



CM 2

CRN 126659-18-5
CMF C18 H22 O8



$=CH_2$

CM 3

CRN 1321-74-0
CMF C10 H10
CCI IDS

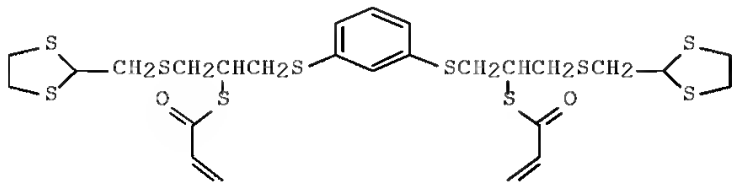
2 [D1—CH═CH2]

IC ICM C08F020-38
ICS C07C323-19; C07C327-28; C07D277-12; C07D277-16; C07D277-56; C07D333-40; C07D339-06; C07D339-08; C07D341-00; G02B001-04
CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 38
IT 422311-61-3P 422311-62-4P 422311-63-5P 422311-64-6P
422311-65-7P 422311-66-8P 422311-67-9P
422311-68-0P 422311-69-1P 422311-70-4P
(acrylic acid thioester compns. for optical parts with high refractive index and impact resistance)

L17 ANSWER 10 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:244667 HCAPLUS Full-text
DOCUMENT NUMBER: 136:264280
TITLE: Sulfur-containing (meth)acrylic acid thioesters, their compositions, cured products, and optical materials
INVENTOR(S): Okuma, Tadashi; Imai, Masao; Ootsuji, Atsuo
PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 56 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002097223	A	20020402	JP 2000-288319 <--	20000922
PRIORITY APPLN. INFO.:			JP 2000-288319 <--	20000922

OTHER SOURCE(S): MARPAT 136:264280
ED Entered STN: 02 Apr 2002
GI



I

AB The thioesters, useful for optical lenses, recording materials, liquid crystal cells, optical fiber coatings, etc., are I (R1-R4 = H, alkyl, alkoxy, nitro, halo; R5, R8 = S-containing alkyl; R6, R9 = S-containing substituent; R7, R10 = H, Me; Z1, Z2 = O, S). Thus, 2-mercaptomethyl-1,3-dithiolane was reacted with benzenebis(epithiopropylsulfide) and esterified with acrylic chloride to give I [R1-R5, R7, R8, R10 = H; R6, R9 = (1,3-dithiolan-2- yl)methylthio; Z1, Z2 = S], which was mixed with Darocur 1173 (photoinitiator), resorcinol diglycidyl ether diacrylate, and divinylbenzene and cured by UV-irradiation to give a transparent lens showing reflective index 1.659, Abbe number 33.8, Tg ≥70°, and good impact resistance.

IT **405261-31-6P 405261-32-7P 405261-33-8P**
405261-34-9P 405261-35-0P 405261-36-1P
(sulfur-containing (meth)acrylic acid thioesters for polymers for optical materials)

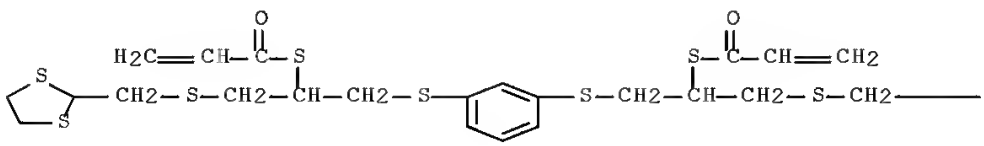
RN 405261-31-6 HCAPLUS

CN 2-Propenoic acid, 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester, polymer with diethenylbenzene and S,S'-[1,3-phenylenebis[thio[1-[[(1,3-dithiolan-2-ylmethyl)thio]methyl]-2,1-ethanediyl]]] di-2-propenethioate (9CI) (CA INDEX NAME)

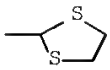
CM 1

CRN 405261-27-0
CMF C26 H34 O2 S10

PAGE 1-A



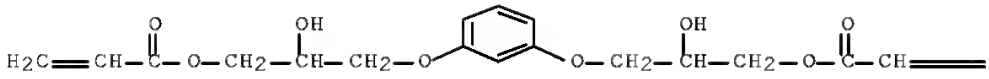
PAGE 1-B



CM 2

CRN 126659-18-5
CMF C18 H22 O8

PAGE 1-A



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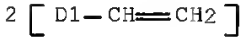
CM 3

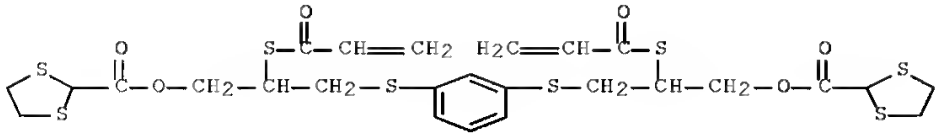
CRN 1321-74-0
CMF C10 H10
CCI IDS



RN 405261-32-7 HCAPLUS
CN 1,3-Dithiolane-2-carboxylic acid, 1,3-phenylenebis[thio[2-[(1-oxo-2-propenyl)thio]-3,1-propanediyl]] ester, polymer with diethenylbenzene and 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

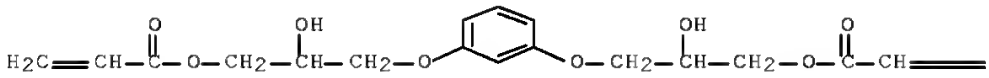
CRN 405261-28-1
CMF C26 H30 O6 S8



CM 2

CRN 126659-18-5
CMF C18 H22 O8

PAGE 1-A



PAGE 1-B

$=CH_2$

CM 3

CRN 1321-74-0
CMF C10 H10
CCI IDS

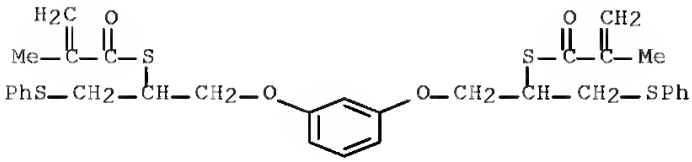
2 [D1—CH═CH2]

RN 405261-33-8 HCAPLUS
CN 2-Propenoic acid, 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)]

ester, polymer with diethenylbenzene and 1,3-phenylenebis[oxy[1-[(phenylthio)methyl]-2,1-ethanediyl]] bis(2-methyl-2-propenethioate) (9CI) (CA INDEX NAME)

CM 1

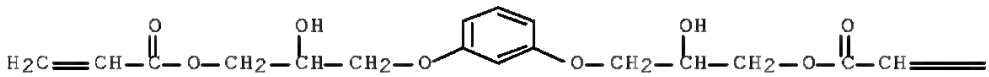
CRN 405261-29-2
CMF C32 H34 O4 S4



CM 2

CRN 126659-18-5
CMF C18 H22 O8

PAGE 1-A



PAGE 1-B

CM 3

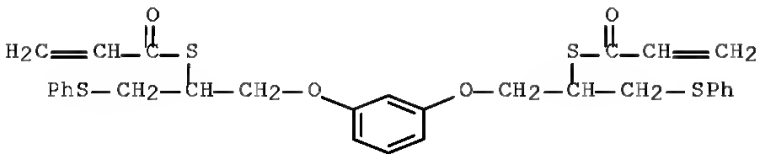
CRN 1321-74-0
CMF C10 H10
CCI IDS

2 [D1—CH═CH2]

RN 405261-34-9 HCAPLUS
CN 2-Propenoic acid, 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester, polymer with diethenylbenzene and 1,3-phenylenebis[oxy[1-[(phenylthio)methyl]-2,1-ethanediyl]] di-2-propenethioate (9CI) (CA INDEX NAME)

CM 1

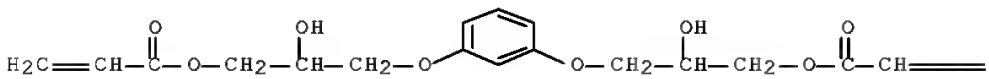
CRN 405261-26-9
CMF C30 H30 O4 S4



CM 2

CRN 126659-18-5
CMF C18 H22 O8

PAGE 1-A

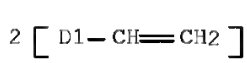


PAGE 1-B

═CH2

CM 3

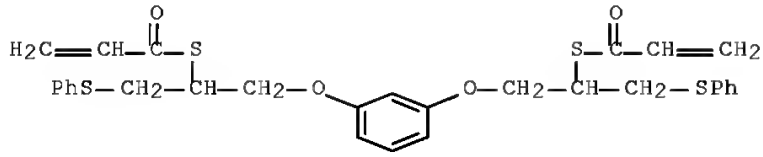
CRN 1321-74-0
CMF C10 H10
CCI IDS



RN 405261-35-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, oxydi-2,1-ethanediyl ester, polymer with 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] di-2-propenoate and 1,3-phenylenebis[oxy[1-[(phenylthio)methyl]-2,1-ethanediyl]] di-2-propenethioate (9CI) (CA INDEX NAME)

CM 1

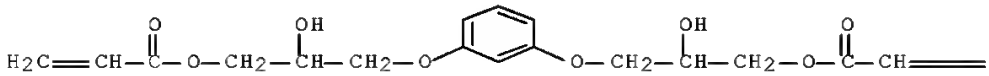
CRN 405261-26-9
CMF C30 H30 O4 S4



CM 2

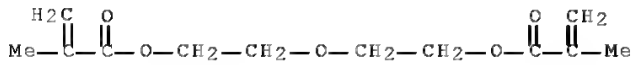
CRN 126659-18-5
CMF C18 H22 O8

PAGE 1-A



CM 3

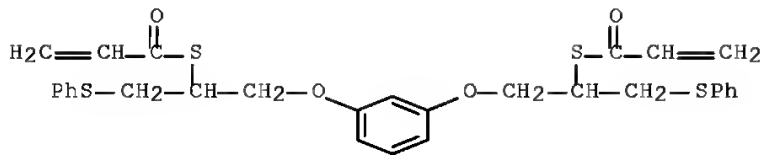
CRN 2358-84-1
CMF C12 H18 O5



RN 405261-36-1 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, phenyl ester, polymer with 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] di-2-propenoate and 1,3-phenylenebis[oxy[1-[(phenylthio)methyl]-2,1-ethanediyl]] di-2-propenethioate (9CI) (CA INDEX NAME)

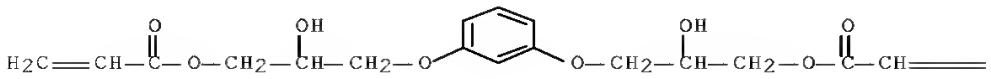
CM 1

CRN 405261-26-9
CMF C30 H30 O4 S4



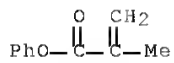
CM 2

CRN 126659-18-5
CMF C18 H22 O8



CM 3

CRN 2177-70-0
CMF C10 H10 O2



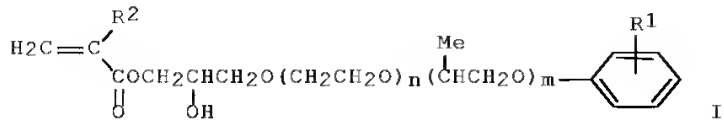
IC ICM C08F020-38
ICS C07C323-12; C07C327-22; C07C327-28; C07D277-10; C07D277-16; C07D277-56; C07D333-40; C07D339-06; C07D339-08; C07D341-00; C08F002-50; G02B001-04; G02C007-02
CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 37, 73, 74
IT 405261-30-5P **405261-31-6P 405261-32-7P 405261-33-8P 405261-34-9P 405261-35-0P 405261-36-1P**
(sulfur-containing (meth)acrylic acid thioesters for polymers for optical materials)

L17 ANSWER 11 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:10143 HCAPLUS Full-text
DOCUMENT NUMBER: 136:61515
TITLE: Photopolymerizable composition
INVENTOR(S): Kumazawa, Akira; Ishino, Shinichiro; Obiya, Hiroyuki; Tazawa, Kenji
PATENT ASSIGNEE(S): Tokyo Ohka Kogyo Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 13 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1168080	A2	20020102	EP 2001-111289 <--	20010516
EP 1168080	A3	20030806		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002006484	A	20020109	JP 2000-186308 <--	20000621
JP 3824128	B2	20060920		
US 2002031723	A1	20020314	US 2001-855785 <--	20010515

US 6506540 B2 20030114
PRIORITY APPLN. INFO.: JP 2000-186308 A 20000621
<--

ED Entered STN: 04 Jan 2002
GI



I

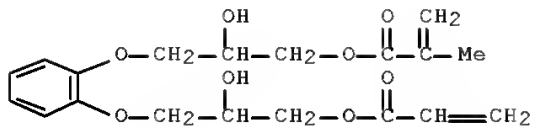
AB A photopolymerizable composition comprises (a) a polymer binder; (b) a photopolymerizable monomer having the structure of I (R1 = H, hydroxyl group, C1-9 alkyl optionally having a hydroxyl group, etc.; R2 = H, methyl; m+n ≤14); and (c) a photopolymn. initiator. The present invention relates to photopolymerizable composition which has an excellent adhesion to a substrate, shows good burn-out properties, and forms a pattern with good profiles.

IT **382630-36-6P 382630-43-5P**
(photopolymerizable composition containing homopolymer)

RN 382630-36-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-hydroxy-3-[2-[2-hydroxy-3-[(1-oxo-2-propenyl)oxy]propoxy]phenoxy]propyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

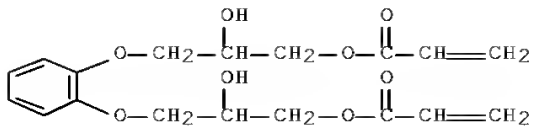
CRN 382630-35-5
CMF C19 H24 O8



RN 382630-43-5 HCAPLUS
CN 2-Propenoic acid, 1,2-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 338985-93-6
CMF C18 H22 O8



IC ICM G03F007-027
CC 74-4 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35, 38
IT 25398-67-8P 70856-48-3P 382630-30-0P 382630-34-4P
382630-36-6P 382630-39-9P 382630-42-4P
382630-43-5P
(photopolymerizable composition containing homopolymer)

L17 ANSWER 12 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:805323 HCAPLUS Full-text
DOCUMENT NUMBER: 135:350670
TITLE: Epoxy resin (meth)acrylate, its polycarboxylic acid ester, and resin composition containing it for color filter
INVENTOR(S): Maeda, Masahiko; Arakawa, Motohiro; Inoue, Rie; Tamura, Fumihide
PATENT ASSIGNEE(S): Nippon Shokubai Kagaku Kogyo Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

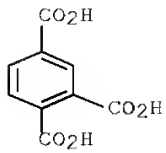
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001310927	A	20011106	JP 2000-130948 <--	20000428
PRIORITY APPLN. INFO.:			JP 2000-130948 <--	20000428

ED Entered STN: 06 Nov 2001
AB The composition contains unsatd. carboxylic acid prepared by reaction of epoxy resin G[OYOCH2CH(OH)CH2OZOCH2CH(OH)CH2]nOYOG [G = glycidyl; Y = (un)substituted bisphenol residue, (un)substituted p-phenylene, oxyalkylene, COC6H4CO; Z = 9,9-bis(hydroxyphenyl)fluorene residue, phenanthrene-9,10-diyl, anthracene-9,10-diyl, 1,1'-binaphthalene-2,2'- diyl] with (meth)acrylic acid followed by polybasic carboxylic acid and/or its anhydride. The composition gives a color filter showing high hardness and good patterning property even with short exposure.
IT **371778-40-4P**
(epoxy resin (meth)acrylate polycarboxylate for color filter)
RN 371778-40-4 HCAPLUS
CN Phenol, 4,4'-(9H-fluoren-9-ylidene)bis-, polymer with 2,2'-[[2,5-bis(1,1-dimethylethyl)-1,4-phenylene]bis(oxymethylene)]bis[oxirane], 1,2,4-benzenetricarboxylate 2-propenoate (9CI) (CA INDEX NAME)

CM 1

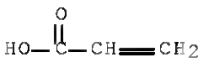
CRN 528-44-9

CMF C9 H6 O6



CM 2

CRN 79-10-7
CMF C3 H4 O2

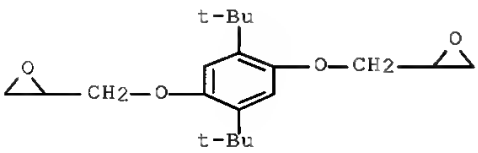


CM 3

CRN 248255-42-7
CMF (C25 H18 O2 . C20 H30 O4)x
CCI PMS

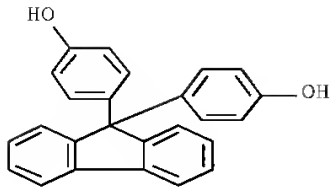
CM 4

CRN 64777-22-6
CMF C20 H30 O4



CM 5

CRN 3236-71-3
CMF C25 H18 O2



IC ICM C08G059-17
ICS C08G059-14; C08K003-00; C08K005-00; C08L063-10; G02B005-20; G03F007-027
CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 37
IT 64630-63-3DP, reaction products with epoxy resin acrylate trimellitate 371778-37-9P, 9,9-bis(4-hydroxyphenyl)fluorene-GY 250 copolymer acrylate hexahydrophthalate 371778-38-0DP, 9,9-bis(4-hydroxyphenyl)fluorene-GY 250 copolymer acrylate trimellitate, reaction products with (epoxycyclohexyl)methyl acrylate 371778-39-1P, 9,9-Bis(4-hydroxyphenyl)fluorene-GY 250 copolymer acrylate pyromellitate trimellitate **371778-40-4P** 371778-42-6P, 9,9-Bis(4-hydroxyphenyl)fluorene-9,10-phenanthrenehydroquinone copolymer acrylate trimellitate 371778-44-8P, 9,9-Bis(4-hydroxyphenyl)fluorene-9,10-anthrahydroquinone copolymer acrylate trimellitate 371778-46-0P, 9,9-Bis(4-hydroxyphenyl)fluorene-Denacol EX 911 copolymer acrylate phthalate 371778-48-2P, 9,9-Bis(4-hydroxyphenyl)fluorene-Denacol EX 721 copolymer acrylate hexahydrophthalate
(epoxy resin (meth)acrylate polycarboxylate for color filter)

L17 ANSWER 13 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:663120 HCAPLUS Full-text
DOCUMENT NUMBER: 136:6399
TITLE: Synthesis and photochemical reaction of high performance UV curing oligomers
AUTHOR(S): Nishikubo, Tadatomi; Kameyama, Atsushi
CORPORATE SOURCE: Department of Applied Chemistry, Faculty of Engineering, Kanagawa University, Kanagawa-ku, Yokohama, 221-8686, Japan
SOURCE: Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) **(2001)**, 42(2), 722-723
CODEN: ACPPAY; ISSN: 0032-3934
PUBLISHER: American Chemical Society, Division of Polymer Chemistry
DOCUMENT TYPE: Journal; (computer optical disk)
LANGUAGE: English
ED Entered STN: 11 Sep 2001
AB Calixarene derivs. containing (meth)acrylate, vinyl ether, propargyl ether, oxetane, oxirane, or spiro ortho ester groups were synthesized by reaction of calixarenes with (meth)acrylic acid derivs., vinyl ether compds., propargyl bromide, oxetane derivs., epibromohydrin, and spiro ortho ester derivs. The calixarene derivs. containing photoreactive groups had excellent thermal stability and high photochem. reactivity. The calixarene derivs. are of interest for UV curing systems, e.g., inks, coatings, solder masks, adhesives, and microelectronics uses.

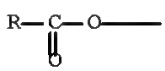
IT **245416-18-6P**
(monomer; preparation and photochem. reaction of calixarene oligomers containing meth(acrylate) and vinyl and oxetane substituents for UV-curable formulations)

RN 245416-18-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (5,11,17,23,29,35-hexamethylheptacyclo[31.3.1.13,7.19,13.115,19.121,25.127,31]dotetracon ta-1(37),3,5,7(42),9,11,13(41),15,17,19(40),21,23,25(39),27,29,31(38), 33,35-octadecaene-37,38,39,40,41,42-hexayl)hexakis[oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)

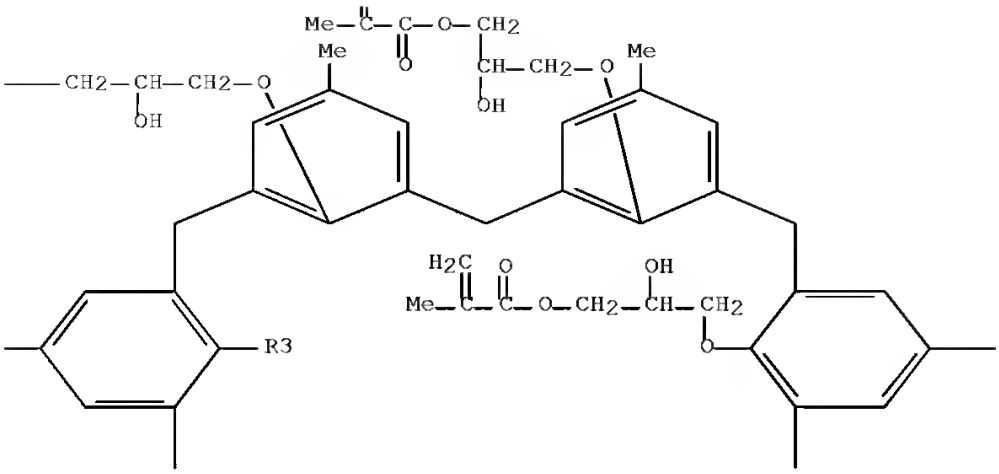
PAGE 1-B

PAGE 2-A



Me—

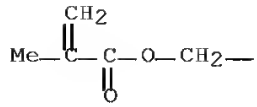
PAGE 2-B

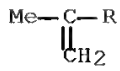


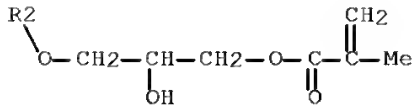
PAGE 2-C

—Me

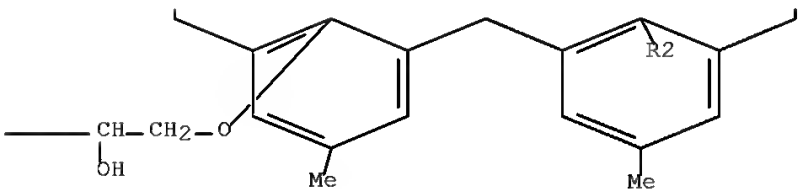
PAGE 3-A



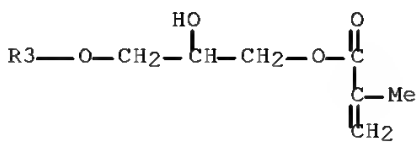




PAGE 3-B



PAGE 4-A



CC 35-4 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 37

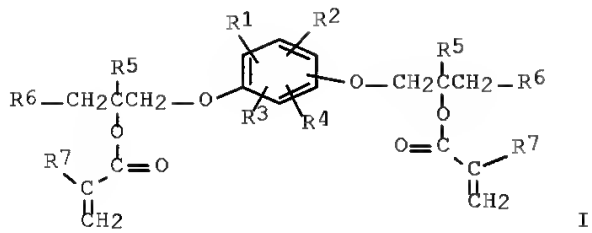
IT 221550-29-4P 245416-15-3P 245416-16-4P 245416-17-5P
245416-18-6P 245416-19-7P 245416-20-0P 375387-44-3P
(monomer; preparation and photochem. reaction of calixarene oligomers containing meth(acrylate) and vinyl and oxetane substituents for UV-curable formulations)

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 14 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:603582 HCAPLUS Full-text
DOCUMENT NUMBER: 135:181670
TITLE: (Meth)acrylate ester compositions and their cured products and optical parts with good mechanical properties
INVENTOR(S): Imai, Masao; Sugimoto, Kenichi; Okuma, Tadashi; Takagi, Masatoshi; Fujii, Kenichi; Otsuji, Atsuo
PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 34 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001226438	A	20010821	JP 2000-41496 <--	20000218
PRIORITY APPLN. INFO.:			JP 2000-41496 <--	20000218

ED Entered STN: 21 Aug 2001
GI



I

AB The compns., useful for optical lenses, eyeglasses, etc., comprise monomers containing S-containing (meth)acrylate esters I (R1-R4 = H, alkyl, alkoxy, nitro, halo; R5 = H, alkyl; R6 = S-containing substituent; R7 = H, Me) and OH-containing (meth)acrylate esters and polymerization initiators. Thus, monomers containing I [R1-R4, R5, R7 = H; R6 = 2-(1,3-dithiolan-4-yl)ethylthio], resorcinol diglycidyl ether diacrylate, tetracyclo[4.4.0.12,5.17,10]dodecyl acrylate, and ethylene glycol dimethacrylate were UV-irradiated in the presence of 2-hydroxy-2-methyl-1-phenylpropan-1-one in a mold to give a colorless transparent lens showing reflective index 1.595, Abbe's number 41.0, Tg 90°, and good impact resistance.

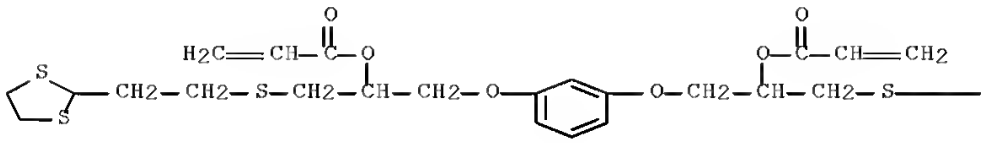
IT **355129-62-3P 355129-63-4P**
((meth)acrylate ester compns. for optical lens with good mech. properties)

RN 355129-62-3 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with 1,3-phenylenebis[oxy[1-[[[2-(1,3-dithiolan-2-yl)ethyl]thio]methyl]-2,1-ethanediyl]] di-2-propenoate and 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] di-2-propenoate (9CI) (CA INDEX NAME)

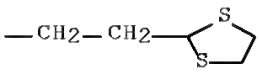
CM 1

CRN 355129-59-8
CMF C28 H38 O6 S6

PAGE 1-A



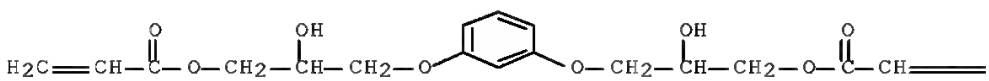
PAGE 1-B



CM 2

CRN 126659-18-5
CMF C18 H22 O8

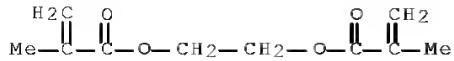
PAGE 1-A



PAGE 1-B

CM 3

CRN 97-90-5
CMF C10 H14 O4

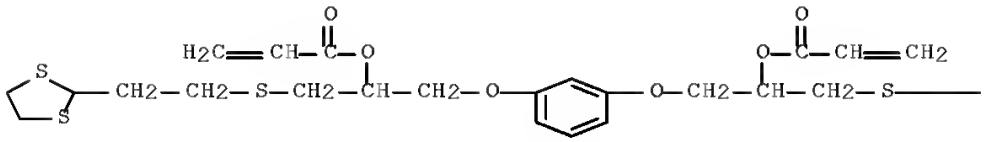


RN 355129-63-4 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, (2,4,6-trioxo-1,3,5-triazine-1,3,5(2H,4H,6H)-triyl)tri-2,1-ethanediyl ester, polymer with 1,2-ethanediyl bis(2-methyl-2-propenoate), 1,3-phenylenebis[oxy[1-[[[2-(1,3-dithiolan-2-yl)ethyl]thio]methyl]-2,1-ethanediyl]] di-2-propenoate and 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] di-2-propenoate (9CI) (CA INDEX NAME)

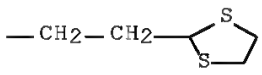
CM 1

CRN 355129-59-8
CMF C28 H38 O6 S6

PAGE 1-A



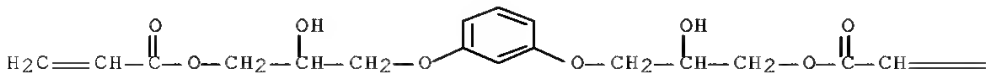
PAGE 1-B



CM 2

CRN 126659-18-5
CMF C18 H22 O8

PAGE 1-A



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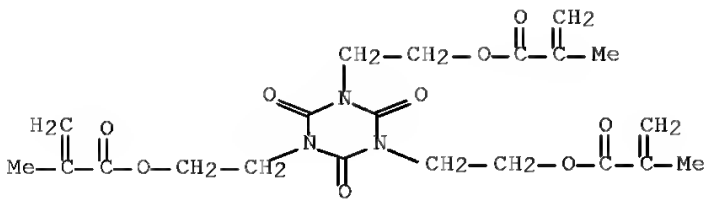
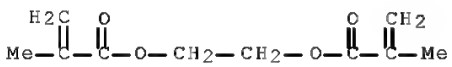
CM 3

CRN 35838-12-1
CMF C21 H27 N3 O9



CM 4

CRN 97-90-5
CMF C10 H14 O4



IC ICM C08F220-38
ICS G02B001-04; C07C323-12; C07C323-19; C07C323-20; C07C323-52; C07C323-62; C07C327-28; C07D277-12; C07D277-18; C07D277-56; C07D333-40; C07D339-06; C07D339-08; C07D341-00
CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 63, 73
IT **355129-62-3P 355129-63-4P** 355129-64-5P
((meth)acrylate ester compns. for optical lens with good mech. properties)

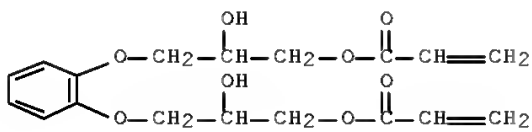
L17 ANSWER 15 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:377054 HCAPLUS Full-text
DOCUMENT NUMBER: 134:359530
TITLE: Photopolymerizable composition with excellent sensitivity and resolution
INVENTOR(S): Kumazawa, Akira; Ishino, Shinichiro; Obitani, Hiroyuki; Tasawa, Kenji
PATENT ASSIGNEE(S): Tokyo Ohka Kogyo Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001142207	A	20010525	JP 1999-326682 <--	19991117
JP 3329777	B2	20020930		
TW 583509	B	20040411	TW 2001-90111723 <--	20010516

PRIORITY APPLN. INFO.: JP 1999-326682 A 19991117 <--
JP 2000-186308 A 20000621 <--

ED Entered STN: 25 May 2001
AB In the title photopolymerizable composition comprising (A) polymer binder, (B) photopolymerizable monomers, and (C) photopolymn. initiator, the photopolymerizable monomers include at least 1 acrylic monomer represented by CH2:CHCO2CH2C(OH)HCH2O(CH2CH2O)n(C(CH3)HCH2O)mC6H4R1 [R1 = H, OH, C1-9-alkyl, CH2:C(R2)CO2CH2C(OH)HCH2O(CH2CH2O)p(C(CH3)HCH 2O)q-; R2 = H, OH, C1-9-alkyl; m, n, p, q = number; m+n ≤14; p+q ≤14]. The photopolymerizable composition shows excellent adhesion to the substrate. The photopolymerizable composition is especially suitable for semiconductor device fabrication.
IT **338985-93-6**
(acrylic monomer in photopolymerizable composition with excellent sensitivity and resolution)
RN 338985-93-6 HCAPLUS
CN 2-Propenoic acid, 1,2-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)



IC ICM G03F007-027
ICS C08F002-46; C08F299-02; C08L033-14; G03F007-028
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
IT 1023-26-3 16969-10-1 338985-92-5 **338985-93-6**
(acrylic monomer in photopolymerizable composition with excellent sensitivity and resolution)

L17 ANSWER 16 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:328839 HCAPLUS Full-text
DOCUMENT NUMBER: 134:344633
TITLE: X-ray detectable curable dental compositions containing spiro group-containing (meth)acrylates and showing high refractive index
INVENTOR(S): Honda, Shigemichi; Yamamoto, Takashi; Ueki, Hideyuki; Takuma, Keisuke; Otsuji, Atsuo; Suzuki,

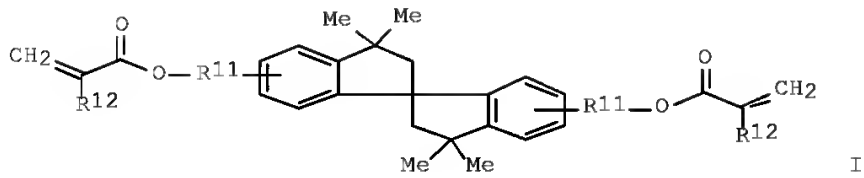
Rihoko
PATENT ASSIGNEE(S): Sun Medical Co., Ltd., Japan; Mitsui Chemicals Inc.
SOURCE: Jpn. Kokai Tokkyo Koho, 18 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001122721	A	20010508	JP 1999-306930 <--	19991028

PRIORITY APPLN. INFO.: JP 1999-306930 <-- 19991028

ED Entered STN: 09 May 2001

GI



I

AB Title compns., useful for composite resins, dental cement, adhesives, etc., contain spiro group-containing (meth)acrylates I [R11 = (OH-containing) linear or branched (poly)oxyalkylene; R12 = H, Me], polymerizable monomers, and polymerization initiators. Thus, I (R11 = polyoxyethylene with average d.p. 3, R12 = Me) 70, NK Ester 3G (triethylene glycol dimethacrylate) 30, camphor quinone 0.1, and Et 4- dimethylaminobenzoate 0.1 part were mixed to give syrup with N20D 1.52 at 20, which was irradiated to show bending strength 36.0 MPa and flexural modulus 791 MPa.

IT **338465-25-1P 338465-26-2P 338465-29-5P**
(x-ray detectable curable dental compns. containing spiro group-containing (meth)acrylates and showing high refractive index)

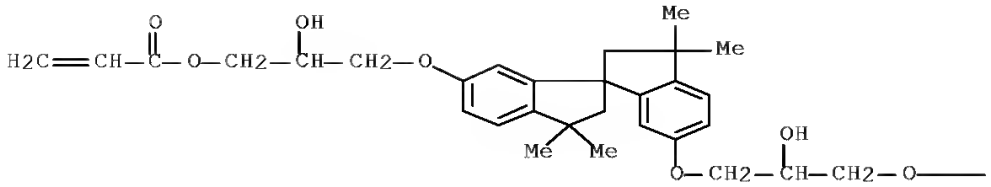
RN 338465-25-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with (2,2',3,3'-tetrahydro-3,3,3',3'-tetramethyl-1,1'-spirobi[1H-indene]-6,6'-diyl)bis[oxy(2-hydroxy-3,1-propanediyl)] di-2-propenoate (9CI) (CA INDEX NAME)

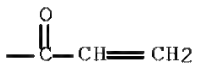
CM 1

CRN 209254-63-7
CMF C33 H40 O8

PAGE 1-A

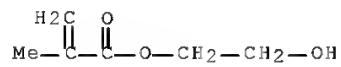


PAGE 1-B



CM 2

CRN 868-77-9
CMF C6 H10 O3

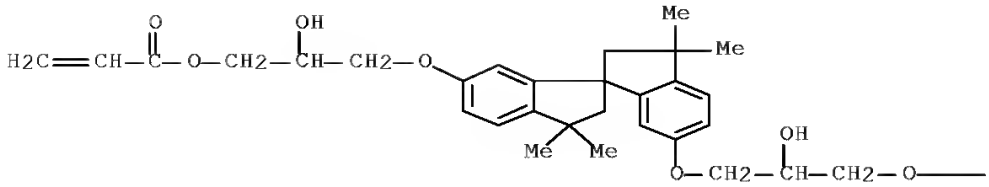


RN 338465-26-2 HCAPLUS
CN 5-Isobenzofurancarboxylic acid, 1,3-dihydro-1,3-dioxo-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 2-hydroxyethyl 2-methyl-2-propenoate and (2,2',3,3'-tetrahydro-3,3,3',3'-tetramethyl-1,1'-spirobi[1H-indene]-6,6'-diyl)bis[oxy(2-hydroxy-3,1-propanediyl)] di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 209254-63-7
CMF C33 H40 O8

PAGE 1-A



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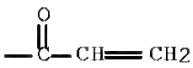

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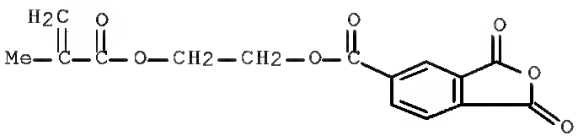
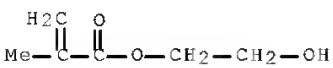
CRN 70293-55-9
CMF C15 H12 O7



CM 3

CRN 868-77-9
CMF C6 H10 O3



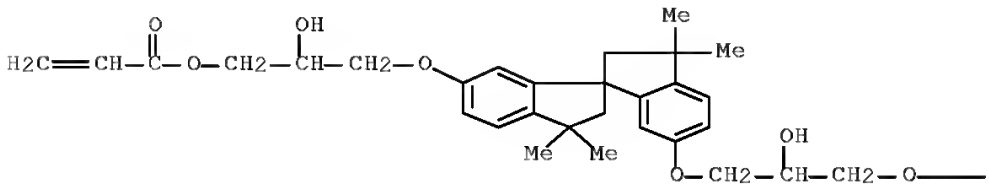
RN 338465-29-5 HCAPLUS
CN 1,2,4-Benzenetricarboxylic acid, 4-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl] ester, polymer with 2-hydroxyethyl 2-methyl-2-propenoate and (2,2',3,3'-tetrahydro-3,3,3',3'-tetramethyl-

1,1'-spirobi[1H-indene]-6,6'-diyl)bis[oxy(2-hydroxy-3,1-propanediyl)] di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 209254-63-7
CMF C33 H40 O8

PAGE 1-A



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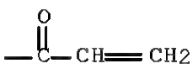
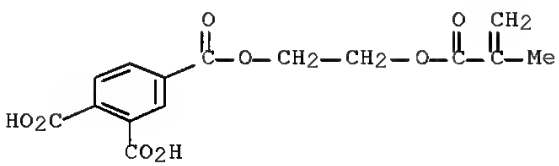


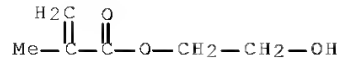
CM 2

CRN 68183-31-3
CMF C15 H14 O8



CM 3

CRN 868-77-9
CMF C6 H10 O3



IC ICM A61K006-083
ICS A61K006-00
CC 63-7 (Pharmaceuticals)
IT 338465-23-9P **338465-25-1P 338465-26-2P**
338465-27-3P 338465-28-4P **338465-29-5P**
(x-ray detectable curable dental compns. containing spiro group-containing (meth)acrylates and showing high refractive index)

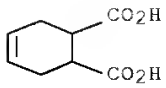
L17 ANSWER 17 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:235652 HCAPLUS Full-text
DOCUMENT NUMBER: 134:274640
TITLE: Diluted alkali-developable electrically insulating material for multilayer printed circuit board
INVENTOR(S): Kameyama, Hiroshi; Kitazawa, Seiichi
PATENT ASSIGNEE(S): Dainippon Ink and Chemicals, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001089644	A	20010403	JP 1999-268554 <--	19990922
PRIORITY APPLN. INFO.:			JP 1999-268554 <--	19990922

ED Entered STN: 04 Apr 2001
AB The material contains (A) vinyl ester resins having naphthalene structures, radically polymerizable unsatd. groups, and CO2H in a mol., (B) diluents, (C) photopolymn. initiators, and (D) thermosetting components. The material shows good heat and solvent resistance and good adhesion strength to Cu to be useful for manufacture of multilayer printed circuit boards by build-up method.
IT **332127-25-0P**, EXA 4700 acrylate ester with tetrahydrophthalic anhydride **332127-28-3P**, HP 4032 acrylate ester with tetrahydrophthalic anhydride **332127-32-9P**, 1,1'-Bi(2,7-diglycidyloxy)naphthyl acrylate ester with tetrahydrophthalic anhydride **332127-36-3P**, 1-(2,7-Diglycidyloxy)-1'-(2'-diglycidyloxy)binaphthyl acrylate ester with tetrahydrophthalic anhydride
(diluted alkali-developable elec. insulating material for multilayer printed circuit board)
RN 332127-25-0 HCAPLUS
CN Oxirane, 2,2',2'',2'''-[methylenebis[1,2,7-naphthalenetriylbis(oxymethylene)]]tetrakis-, homopolymer, hydrogen 4-cyclohexene-1,2-dicarboxylate 2-propenoate (9CI) (CA INDEX NAME)

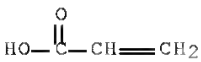
CM 1

CRN 88-98-2
CMF C8 H10 O4



CM 2

CRN 79-10-7
CMF C3 H4 O2

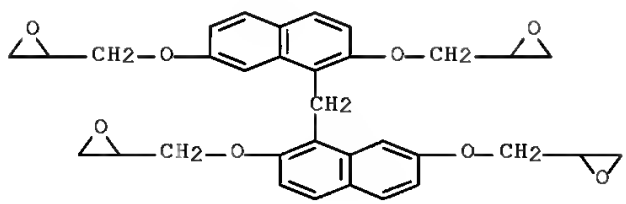


CM 3

CRN 154445-49-5
CMF (C33 H32 O8)x
CCI PMS

CM 4

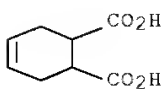
CRN 146794-56-1
CMF C33 H32 O8



RN 332127-28-3 HCAPLUS
CN Oxirane, 2,2'-[1,7-naphthalenediylbis(oxymethylene)]bis-, homopolymer, hydrogen 4-cyclohexene-1,2-dicarboxylate 2-propenoate (9CI) (CA INDEX NAME)

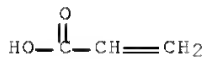
CM 1

CRN 88-98-2
CMF C8 H10 O4



CM 2

CRN 79-10-7
CMF C3 H4 O2

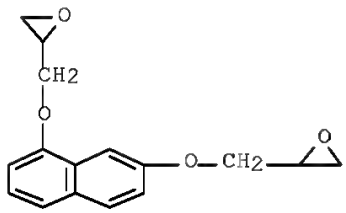


CM 3

CRN 332127-27-2
CMF (C16 H16 O4)x
CCI PMS

CM 4

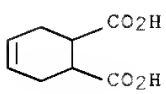
CRN 149837-53-6
CMF C16 H16 O4



RN 332127-32-9 HCAPLUS
CN Oxirane, 2,2',2'',2'''-[[1,1'-binaphthalene]-2,2',7,7'-tetrayltetrakis(oxymethylene)]tetrakis-, homopolymer, hydrogen 4-cyclohexene-1,2-dicarboxylate 2-propenoate (9CI) (CA INDEX NAME)

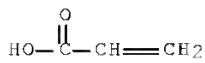
CM 1

CRN 88-98-2
CMF C8 H10 O4



CM 2

CRN 79-10-7
CMF C3 H4 O2

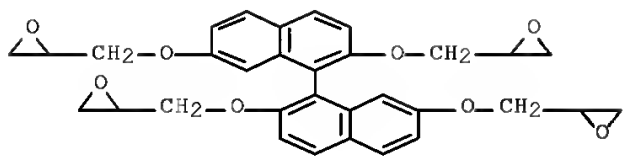


CM 3

CRN 332127-31-8
CMF (C32 H30 O8)x
CCI PMS

CM 4

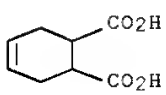
CRN 332127-30-7
CMF C32 H30 O8



RN 332127-36-3 HCAPLUS
CN Oxirane, 2,2',2''-[[1,1'-binaphthalene]-2,2',7-triyltris(oxymethylene)]tris-, homopolymer, hydrogen 4-cyclohexene-1,2-dicarboxylate 2-propenoate (9CI) (CA INDEX NAME)

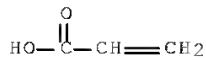
CM 1

CRN 88-98-2
CMF C8 H10 O4



CM 2

CRN 79-10-7
CMF C3 H4 O2

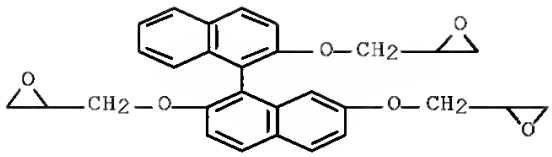


CM 3

CRN 332127-35-2
CMF (C29 H26 O6)x
CCI PMS

CM 4

CRN 332127-34-1
CMF C29 H26 O6



IC ICM C08L063-10
CC 76-14 (Electric Phenomena)
Section cross-reference(s): 38
IT **332127-25-0P**, EXA 4700 acrylate ester with tetrahydrophthalic anhydride **332127-28-3P**, HP 4032 acrylate ester with tetrahydrophthalic anhydride **332127-32-9P**, 1,1'-Bi(2,7-diglycidyloxy)naphthyl acrylate ester with tetrahydrophthalic anhydride **332127-36-3P**, 1-(2,7-Diglycidyloxy)-1'-(2'-diglycidyloxy)binaphthyl acrylate ester with tetrahydrophthalic anhydride
(diluted alkali-developable elec. insulating material for multilayer printed circuit board)

L17 ANSWER 18 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:98652 HCAPLUS Full-text
DOCUMENT NUMBER: 134:155240
TITLE: Photosensitive unsaturated epoxy resin-polyurethane composition for photoresist and formation of solder resist pattern
INVENTOR(S): Akui, Jun; Ozaki, Kazuhiro; Yoshitake, Junya; Miyagawa, Kenji; Seko, Kenji
PATENT ASSIGNEE(S): Kansai Paint Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001033960	A	20010209	JP 1999-203021 <--	19990716
PRIORITY APPLN. INFO.:			JP 1999-203021 <--	19990716

ED Entered STN: 09 Feb 2001

AB The composition contains (A) a photopolymn. initiator, (B) unsatd. polyurethane with acid value 20-300 mg KOH/g, OH value 0-200 mg KOH/g, unsatn. degree 0.2-5.0 mol/kg, and number average mol. weight 400-100,000, which is prepared from a carboxy-containing diol, a diisocyanate, OH-substituted unsatd. resin as a reaction product of 1 mol (as epoxy) diepoxide and 0.8-1.2 mol acid having average mol. weight 72-1000 with average 1 CO2H and average 1 ethylenic unsatd. group, and optionally a polyol, and (C) a thermal crosslinking agent for CO2H and/or OH. The composition is applied on a substrate, patternwise exposed to laser beam directly or through a neg. mask, and developed to give a precise solder resist pattern with improved adhesive strength to substrate and affinity to electroless coating.

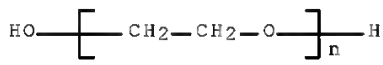
IT **324527-69-7DP**, Denacol EX 201 acrylate-dimethylolpropionic acid-HDI-polyethylene glycol copolymer, reaction product with isocyanatoethyl methacrylate
(acrylic epoxy resin-polyurethane composition containing thermal crosslinking agent for forming solder resist pattern)

RN 324527-69-7 HCAPLUS

CN Propanoic acid, 3-hydroxy-2-(hydroxymethyl)-2-methyl-, polymer with 1,6-diisocyanatohexane, α-hydro-ω-hydroxypoly(oxy-1,2-ethanediyl) and 2,2'-[1,3-phenylenebis(oxymethylene)]bis[oxirane] homopolymer 2-propenoate (9CI) (CA INDEX NAME)

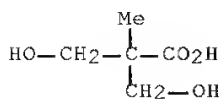
CM 1

CRN 25322-68-3
CMF (C2 H4 O)n H2 O
CCI PMS



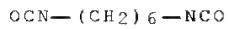
CM 2

CRN 4767-03-7
CMF C5 H10 O4



CM 3

CRN 822-06-0
CMF C8 H12 N2 O2

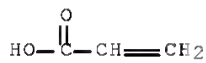


CM 4

CRN 117925-72-1
CMF (C12 H14 O4)x . x C3 H4 O2

CM 5

CRN 79-10-7
CMF C3 H4 O2

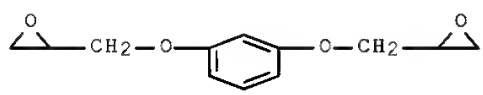


CM 6

CRN 29563-13-1
CMF (C12 H14 O4)x
CCI PMS

CM 7

CRN 101-90-6
CMF C12 H14 O4



IC ICM G03F007-027
ICS G03F007-40; H01L021-027
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38, 76
IT 818-61-1DP, 2-Hydroxyethyl acrylate, reaction product with acrylic epoxy resin-polyurethane 30674-80-7DP, reaction product with acrylic epoxy resin-polyurethanes 41768-20-1DP, reaction product with acrylic epoxy resin-polyurethane and hydroxyethyl acrylate 324527-66-4P, Epikote 828EL acrylate-dimethylolpropionic acid-isophorone diisocyanate copolymer 324527-68-6DP, Celloxide 2021

methacrylate-dimethylolpropionic acid-ethylene glycol-TDI copolymer, reaction product with hydroxyethyl acrylate **324527-69-7DP**, Denacol EX 201 acrylate-dimethylolpropionic acid-HDI-polyethylene glycol copolymer, reaction product with isocyanatoethyl methacrylate (acrylic epoxy resin-polyurethane composition containing thermal crosslinking agent for forming solder resist pattern)

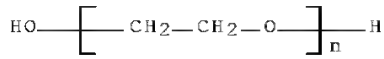
L17 ANSWER 19 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:98651 HCAPLUS Full-text
DOCUMENT NUMBER: 134:155239
TITLE: Photosensitive unsaturated acidic epoxy resin-polyurethane composition for photoresist and formation of resist pattern
INVENTOR(S): Yoshitake, Junya; Miyagawa, Kenji; Seko, Kenji
PATENT ASSIGNEE(S): Kansai Paint Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001033959	A	20010209	JP 1999-203020 <--	19990716
PRIORITY APPLN. INFO.:			JP 1999-203020 <--	19990716

ED Entered STN: 09 Feb 2001
AB The composition contains a photopolymn. initiator and unsatd. polyurethane with acid value 20-300 mg KOH/g, unsatn. degree 0.2-5.0 mol/kg, and number average mol. weight 400-100,000, which is prepared from a carboxy-containing diol, a diisocyanate, OH-substituted unsatd. resin as a reaction product of 1 mol (as epoxy) diepoxide and 0.8-1.2 mol acid having average mol. weight 72-1000 with average 1 CO2H and average 1 ethylenic unsatd. group, and optionally a polyol. The composition is applied on a substrate, patternwise exposed to laser beam directly or through a neg. mask, and developed to give a precise pattern with mech. strength, e.g., impact resistance, etc.
IT **324527-69-7DP**, Denacol EX 201 acrylate-dimethylolpropionic acid-polyethylene glycol-HDI copolymer, reaction product with isocyanatoethyl methacrylate
(unsatd. epoxy resin-polyurethane composition for laser photoresist pattern with improved mech. strength)
RN 324527-69-7 HCAPLUS
CN Propanoic acid, 3-hydroxy-2-(hydroxymethyl)-2-methyl-, polymer with 1,6-diisocyanatohexane, α-hydro-ω-hydroxypoly(oxy-1,2-ethanediyl) and 2,2'-[1,3-phenylenebis(oxymethylene)]bis[oxirane] homopolymer 2-propenoate (9CI) (CA INDEX NAME)

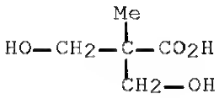
CM 1

CRN 25322-68-3
CMF (C2 H4 O)n H2 O
CCI PMS



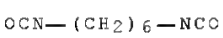
CM 2

CRN 4767-03-7
CMF C5 H10 O4



CM 3

CRN 822-06-0
CMF C8 H12 N2 O2

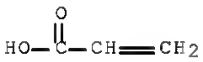


CM 4

CRN 117925-72-1
CMF (C12 H14 O4)x . x C3 H4 O2

CM 5

CRN 79-10-7
CMF C3 H4 O2

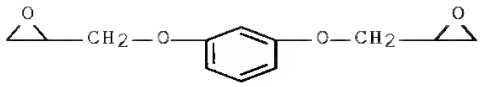


CM 6

CRN 29563-13-1
CMF (C12 H14 O4)x
CCI PMS

CM 7

CRN 101-90-6
CMF C12 H14 O4



IC ICM G03F007-027
ICS G03F007-027; C08F299-06; H05K003-28
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
IT 818-61-1DP, 2-Hydroxyethyl acrylate, reaction products with unsatd. polyurethanes 30674-80-7DP, reaction product with unsatd. polyurethanes 41768-20-1DP, reaction product with unsatd. polyurethane and hydroxyethyl acrylate 324527-66-4P, Epikote 828EL acrylate-dimethylolpropionic acid-isophorone diisocyanate copolymer 324527-68-6DP, Celloxide 2021 methacrylate-dimethylolpropionic acid-ethylene glycol-TDI copolymer, reaction product with hydroxyethyl acrylate **324527-69-7DP**, Denacol EX 201 acrylate-dimethylolpropionic acid-polyethylene glycol-HDI copolymer, reaction product with isocyanatoethyl methacrylate
(unsatd. epoxy resin-polyurethane composition for laser photoresist pattern with improved mech. strength)

L17 ANSWER 20 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:514520 HCAPLUS Full-text
DOCUMENT NUMBER: 131:272201
TITLE: Synthesis and photochemical reaction of novel p-alkylcalix[6]arene derivatives containing acryloyl or methacryloyl groups
AUTHOR(S): Iyo, Masami; Tsutsui, Kosuke; Kameyama, Atsushi; Nishikubo, Tadatoimi
CORPORATE SOURCE: Department of Applied Chemistry, Faculty of Engineering, Kanagawa University, Yokohama, 221-8686, Japan
SOURCE: Journal of Polymer Science, Part A: Polymer Chemistry (**1999**), 37(16), 3071-3078
CODEN: JPACEC; ISSN: 0887-624X
PUBLISHER: John Wiley & Sons, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 18 Aug 1999
AB Novel polyfunctional (meth)acrylates with a calixarene backbone [calixarene (meth)acrylates] were synthesized in good yields by certain reactions of p-methylcalix[6]arene (1a) or p-tert-butylcalix[6]arene (1b) with (meth)acrylate derivs. such as acryloyl chloride, methacryloyl chloride, (2-methacryloxy)ethyl isocyanate, and glycidyl methacrylate. Polyfunctional acrylate 6a having poly(oxyethylene) spacer chain between 1a and acrylate groups was also synthesized by the reaction of the poly(oxyethylene) modified 1a with acrylic acid. Calixarene acrylate 6a was liquid at room temperature, although the other calixarene (meth)acrylates were solid at room temperature The initial decomposition temperature (IDT) of the resulting calixarene (meth)acrylates was measured by the thermogravimetric anal. to evaluate the thermal stability, and it was found that some of the IDTs of the calixarene acrylates were over 400°. This means that calixarene (meth)acrylates have very good thermal stability. The photopolymn. of the resulting some calixarene (meth)acrylates with (2-phenyoxy)ethyl acrylate as a reactive diluent in the presence of photoinitiator proceeded smoothly upon irradiation

with UV light. Therefore, polyfunctional (meth)acrylates with a calixarene backbone can be expected to be novel and thermally stable photoreactive acrylate oligomers.

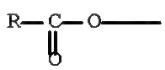
IT **245416-18-6P**
(monomer; synthesis and photochem. reaction of novel p-alkylcalix[6]arene derivs. containing acryloyl or methacryloyl groups)

RN 245416-18-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (5,11,17,23,29,35-hexamethylheptacyclo[31.3.1.13,7.19,13.115,19.121,25.127,31]dotetracon ta-1(37),3,5,7(42),9,11,13(41),15,17,19(40),21,23,25(39),27,29,31(38), 33,35-octadecaene-37,38,39,40,41,42-hexayl)hexakis[oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)

PAGE 1-B

PAGE 2-A



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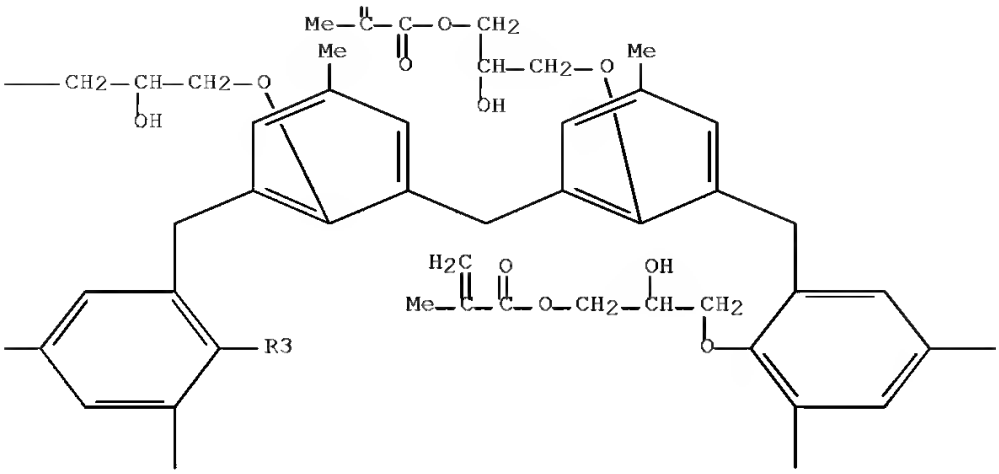
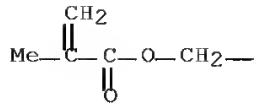
PAGE 2-B

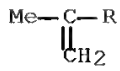


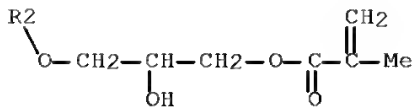
PAGE 2-C

—Me

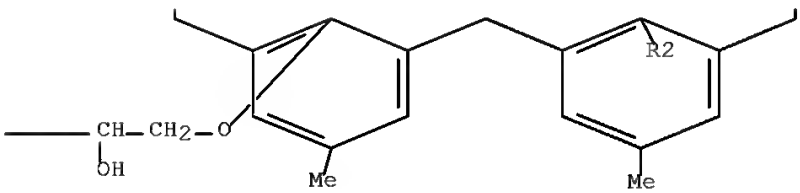
PAGE 3-A







PAGE 3-B



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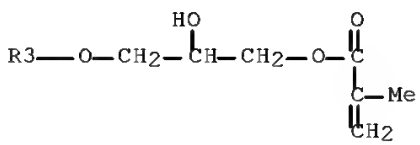


IT **245416-24-4P**
(synthesis, properties and photopolymn. of novel p-alkylcalix[6]arene derivs. containing acryloyl or methacryloyl groups)

RN 245416-24-4 HCAPLUS

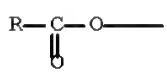
CN 2-Propenoic acid, 2-methyl-, (5,11,17,23,29,35-hexamethylheptacyclo[31.3.1.13,7.19,13.115,19.121,25.127,31]dotetracon ta-1(37),3,5,7(42),9,11,13(41),15,17,19(40),21,23,25(39),27,29,31(38), 33,35-octadecaene-37,38,39,40,41,42-hexayl)hexakis[oxy(2-hydroxy-3,1-propanediyl)] ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 245416-18-6
CMF C90 H108 O24

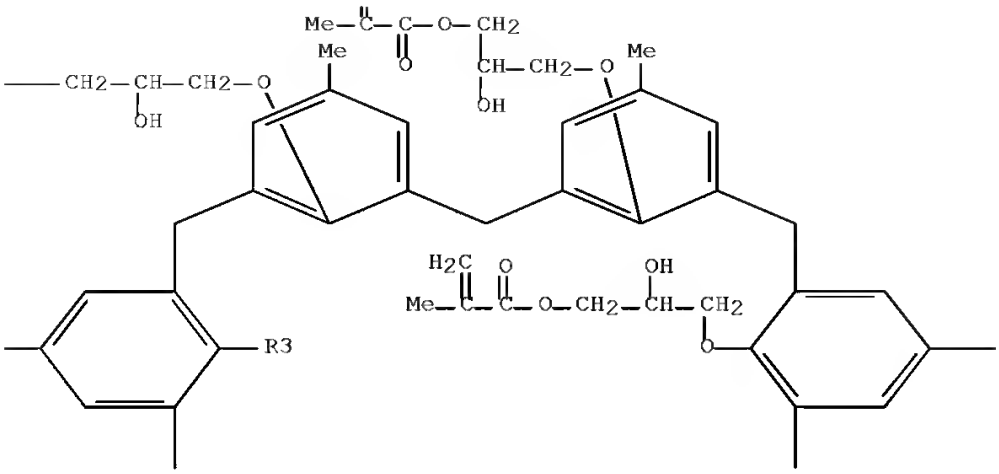
PAGE 1-B

PAGE 2-A



Me—

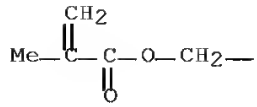
PAGE 2-B

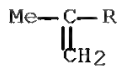


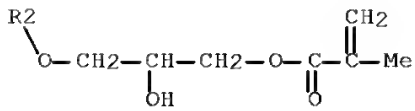
PAGE 2-C

—Me

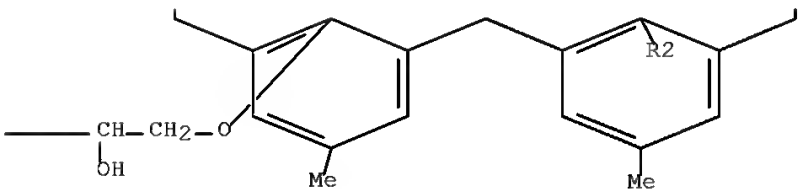
PAGE 3-A



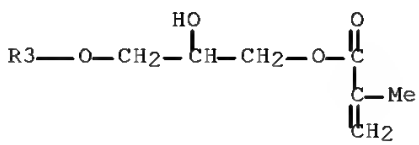




PAGE 3-B



PAGE 4-A



CC 35-2 (Chemistry of Synthetic High Polymers)

IT 220953-77-5P 221550-29-4P 245416-16-4P **245416-18-6P** 245416-19-7P
(monomer; synthesis and photochem. reaction of novel p-alkylcalix[6]arene derivs. containing acryloyl or methacryloyl groups)

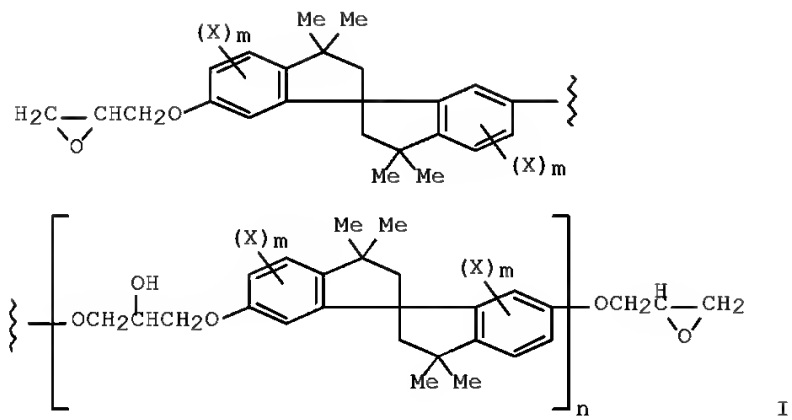
IT 245416-22-2P 245416-23-3P **245416-24-4P** 245416-25-5P 245416-26-6P
(synthesis, properties and photopolymn. of novel p-alkylcalix[6]arene derivs. containing acryloyl or methacryloyl groups)

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 21 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:407843 HCAPLUS Full-text
DOCUMENT NUMBER: 129:101756
TITLE: Polymer optical waveguide and its manufacture
INVENTOR(S): Kurihara, Takashi; Tomaru, Akira; Imamura, Saburo; Otsuji, Akio; Suzuki, Rihoko; Urakami, Tatsunobu; Motoshima, Toshihiro; Takuma, Keisuke
PATENT ASSIGNEE(S): Nippon Telegraph and Telephone Corp., Japan; Mitsui Toatsu Chemicals, Inc.
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10170738	A	19980626	JP 1996-351806 <--	19961212
PRIORITY APPLN. INFO.:			JP 1996-351806 <--	19961212

ED Entered STN: 03 Jul 1998
GI

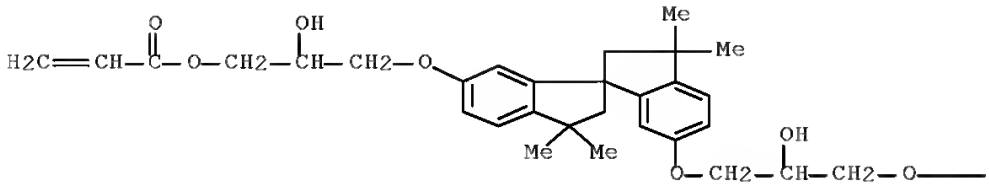


I

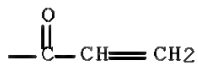
AB The waveguide contains a core/clad containing a racemic polymer comprising an asym. spiro ring-containing epoxy compound I (X = H, alkyl, alkoxy, NO2, halo; m = 1-3; n = 0-10) or an epoxy acrylate compound manufactured from the epoxy compound and (meth)acrylic acid. The waveguide is manufactured by forming core/clad films, resp., in which the core film is manufactured by photolithog., reactive-ion etching, photolocking, and/or molding method. The method gives the waveguide with excellent solvent and heat resistance and low loss and birefringence at low cost.

IT **209254-63-7**
(manufacture of optical waveguide containing asym. spiro ring-containing epoxy
resin)
RN 209254-63-7 HCAPLUS
CN 2-Propenoic acid, (2,2',3,3'-tetrahydro-3,3,3',3'-tetramethyl-1,1'-spirobi[1H-indene]-6,6'-diyl)bis[oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IC ICM G02B006-12
ICS C08G059-20; G02B006-13; C08F299-02
CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 38
IT 120004-95-7 **209254-63-7**
(manufacture of optical waveguide containing asym. spiro ring-containing epoxy
resin)

L17 ANSWER 22 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:776193 HCAPLUS Full-text
DOCUMENT NUMBER: 128:48965
TITLE: UV-curable divinyl esters and ethers for moldings with high refractive index
INVENTOR(S): Chen, Fang; Toh, Huan Kiak
PATENT ASSIGNEE(S): Sola International Holdings Ltd., Australia; Chen, Fang; Toh, Huan Kiak
SOURCE: PCT Int. Appl., 40 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9744372	A1	19971127	WO 1997-AU310 <--	19970522
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9727573	A	19971209	AU 1997-27573 <--	19970522
AU 734097	B2	20010607		
EP 900244	A1	19990310	EP 1997-921527 <--	19970522
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
US 6153663	A	20001128	US 1999-194503 <--	19990331
PRIORITY APPLN. INFO.:			AU 1996-37 <--	A 19960523
			AU 1996-2635 <--	A 19960930
			WO 1997-AU310 <--	W 19970522

ED Entered STN: 12 Dec 1997

AB UV-crosslinkable polymeric casting compns. contain a divinyl ester or ether monomer of a bicyclic or polycyclic compound, and optionally a minor amount of a di- or polythio compound and exhibit faster cure times than similar compns. containing diethylene glycol bis(allyl carbonate) instead of the above described esters and ethers. The moldings exhibit high refractive indexes and good abrasion and impact resistance and hardness and are useful as lenses. A typical divinyl ester is manufactured by esterification of EBPS-300 (bisphenol S-based epoxy resin) with acrylic acid.

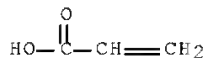
IT **162260-66-4P**, 1,6-Naphthalenediol diglycidyl ether homopolymer acrylate
(UV-curable divinyl esters and ethers for moldings with high refractive index)

RN 162260-66-4 HCAPLUS

CN Oxirane, 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis-, homopolymer, 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7
CMF C3 H4 O2

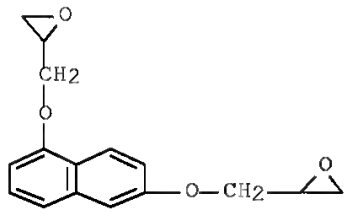


CM 2

CRN 131406-13-8
CMF (C16 H16 O4)x
CCI PMS

CM 3

CRN 27610-48-6
CMF C16 H16 O4



IC ICM C08F218-04
ICS C08F263-02; C08F265-06; G02B001-04
CC 37-3 (Plastics Manufacture and Processing)
IT 41481-63-4P 104673-48-5P **162260-66-4P**, 1,6-Naphthalenediol diglycidyl ether homopolymer acrylate 199790-85-7P
(UV-curable divinyl esters and ethers for moldings with high refractive index)

L17 ANSWER 23 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:195633 HCAPLUS Full-text
DOCUMENT NUMBER: 126:186873
TITLE: Polyester compositions and films with good slipperiness and abrasion resistance for magnetic recording materials
INVENTOR(S): Aoyama, Masatoshi; Kojima, Hiroji; Suzuki, Masaru
PATENT ASSIGNEE(S): Toray Industries, Inc., Japan
SOURCE: Eur. Pat. Appl., 16 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 755975	A2	19970129	EP 1996-305450 <--	19960725
EP 755975	A3	19971008		
EP 755975	B1	20020320		
R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, NL, PT, SE				
JP 09095601	A	19970408	JP 1996-180837 <--	19960710
JP 3629822	B2	20050316		
TW 412567	B	20001121	TW 1996-85108634 <--	19960716
US 5912074	A	19990615	US 1996-682954 <--	19960718
CA 2182143	A1	19970128	CA 1996-2182143	19960726

				<--	
CN 1150163	A	19970521	CN 1996-112260		19960727
				<--	
CN 1080285	B	20020306			
PRIORITY APPLN. INFO.:			JP 1995-192317	A	19950727
				<--	

ED Entered STN: 26 Mar 1997

AB A polyester composition comprises (a) a polyester component and (b) polymer particles (b). At least an outermost layer of the polymer particles (b) is a polymer having hydroxyl groups. The composition can be made into a film especially suitable for use as a substrate in magnetic recording medium. Thus, poly(ethylene terephthalate) was compounded with particles (average particle size 0.5 μ) of bisphenol A dimethacrylate-styrene copolymer and laminated with poly(ethylene terephthalate) to give a film with thickness 1/13/1 μ, slipperiness 0.28 μk, and exhibiting grade A abrasion resistance.

IT **187463-89-4P**, Resorcinol diglycidyl ether diacrylate-styrene copolymer
(particles having surface hydroxy groups; in polyester compns. with good properties for magnetic recording material substrates)

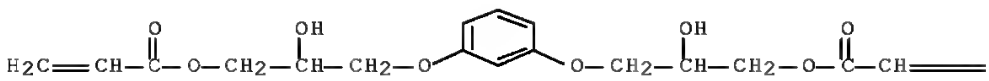
RN 187463-89-4 HCAPLUS

CN 2-Propenoic acid, 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 126659-18-5
CMF C18 H22 O8

PAGE 1-A



PAGE 1-B

$=CH_2$

CM 2

CRN 100-42-5
CMF C8 H8

$H_2C=CH-Ph$

IC ICM C08L067-02

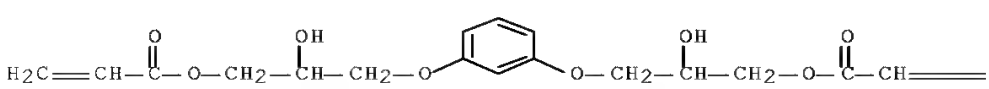
ICS C08J005-18; B32B027-36; G11B005-708
CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 38, 77
IT 30939-37-8P, Bisphenol A diglycidyl ether dimethacrylate-styrene copolymer **187463-89-4P**, Resorcinol diglycidyl ether diacrylate-styrene copolymer 187549-56-0P, Cyclohexanedimethanol diglycidyl ether diacrylate-styrene copolymer
(particles having surface hydroxy groups; in polyester compns. with good properties for magnetic recording material substrates)

L17 ANSWER 24 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1996:713559 HCAPLUS Full-text
DOCUMENT NUMBER: 126:60794
TITLE: Properties of radiation-cured epoxy-acrylic polymers
AUTHOR(S): Danilyuk, O. A.; Kuznetsova, V. M.; Tokar, M. I.; Zadontsev, B. G.; Neroznik, V. G.; Burmenko, A. S.; Shiryaeva, G. V.
CORPORATE SOURCE: Russia
SOURCE: Plasticheskie Massy (**1995**), (2), 22-24
CODEN: PLMSAI; ISSN: 0554-2901
PUBLISHER: Khimiya
DOCUMENT TYPE: Journal
LANGUAGE: Russian
ED Entered STN: 05 Dec 1996
AB Acrylates and methacrylates of diglycidyl ethers/esters of oligomeric epichlorohydrin, p-hydroxybenzoic acid, resorcinol, phthalic acid, and poly(propylene glycol) methacrylate derivative (Akrol 633) were crosslinked radiochem. and thermal and mech. properties of the polymers were studied. Bu and cresyl glycidyl ether acrylates and triethylene glycol dimethacrylate were used as comonomers to modify polymer properties. High mech. strength was observed for the crosslinked epoxy (meth)acrylates.
IT **126659-19-6P**, Resorcinol diglycidyl ether diacrylate homopolymer **184845-25-8P**, Butyl glycidyl ether acrylate-resorcinol diglycidyl ether diacrylate copolymer **184845-27-0P**, Resorcinol diglycidyl ether diacrylate-triethylene glycol dimethacrylate copolymer **184923-31-7P**, Cresyl glycidyl ether acrylate-resorcinol diglycidyl ether diacrylate copolymer
(preparation and properties of radiation-cured epoxy-acrylic polymers)
RN 126659-19-6 HCAPLUS
CN 2-Propenoic acid, 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 126659-18-5
CMF C18 H22 O8

PAGE 1-A



PAGE 1-B

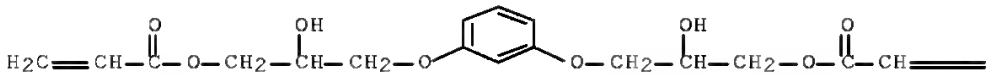
$=CH_2$

RN 184845-25-8 HCAPLUS
CN 2-Propenoic acid, 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester, polymer with 3-butoxy-2-hydroxypropyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 126659-18-5
CMF C18 H22 O8

PAGE 1-A



PAGE 1-B

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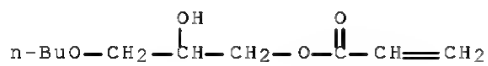
CM 2

CRN 13282-82-1
CMF C10 H18 O4

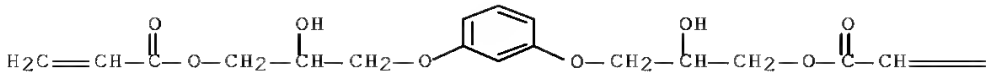


RN 184845-27-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediylbis(oxy-2,1-ethanediyl) ester, polymer with 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] di-2-propenoate (9Cl) (CA INDEX NAME)

CM 1

CRN 126659-18-5
CMF C18 H22 O8

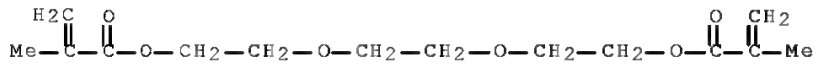
PAGE 1-A



PAGE 1-B

CM 2

CRN 109-16-0
CMF C14 H22 O6

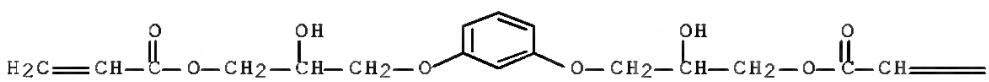


RN 184923-31-7 HCAPLUS
CN 2-Propenoic acid, 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester, polymer with 2-hydroxy-3-(methylphenoxy)propyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 126659-18-5
CMF C18 H22 O8

PAGE 1-A

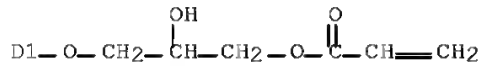


PAGE 1-B

CM 2

CRN 52484-31-8
CMF C13 H16 O4
CCI IDS

D1— Me



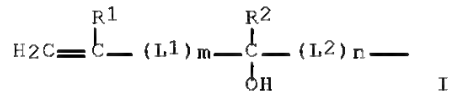
CC 37-6 (Plastics Manufacture and Processing)
IT 83712-39-4DP, Akrol 633, crosslinked 109479-99-4P, Phthalic acid diglycidyl ester diacrylate homopolymer **126659-19-6P**, Resorcinol diglycidyl ether diacrylate homopolymer **184845-25-8P**, Butyl glycidyl ether acrylate-resorcinol diglycidyl ether diacrylate copolymer **184845-27-0P**, Resorcinol diglycidyl ether diacrylate-triethylene glycol dimethacrylate copolymer 184845-30-5P, p-Hydroxybenzoic acid glycidyl ether acrylate homopolymer 184845-33-8P, p-Hydroxybenzoic acid glycidyl ether methacrylate homopolymer 184845-35-0P, Butyl glycidyl ether acrylate-p-Hydroxybenzoic acid glycidyl ether acrylate copolymer 184845-38-3P, p-Hydroxybenzoic acid glycidyl ether acrylate-triethylene glycol dimethacrylate copolymer 184845-41-8P, Poly(epichlorohydrin) acrylate homopolymer **184923-31-7P**, Cresyl glycidyl ether acrylate-resorcinol diglycidyl ether diacrylate copolymer 184923-32-8P, Cresyl glycidyl ether acrylate-p-Hydroxybenzoic acid glycidyl ether acrylate copolymer 185077-18-3P, Poly(epichlorohydrin) methacrylate homopolymer
(preparation and properties of radiation-cured epoxy-acrylic polymers)

L17 ANSWER 25 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1996:622905 HCAPLUS Full-text
DOCUMENT NUMBER: 125:261179
TITLE: Waterless lithographic printing plate master with superior image reproducibility, storage and printing stability
INVENTOR(S): Kokuni, Masahiro; Ikeda, Norimasa; Kawamura, Ken
PATENT ASSIGNEE(S): Toray Industries, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 33 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08184960	A	19960716	JP 1995-202597	19950808

PRIORITY APPLN. INFO.: JP 1995-202597 A 19950808
<--
JP 1994-269911 19941102
<--

ED Entered STN: 21 Oct 1996
GI

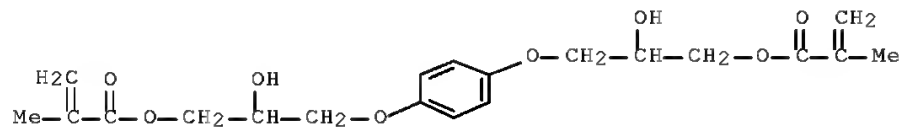


I

AB In the title plate master having a photosensitive layer and an ink-repellent layer on a support, the photosensitive layer contains a polymerizable compound containing ≥1 I (R1, R2 = H, halo, C1-100 alkyl, alkoxy, amido, acyloxy, alkanoyl, formyl, carboxyl, C2-100 alkenyl, alkenyloxy, C4-100 aryl, aryloxy; L1, L2 = connection group; m, n = 0, 1) and an amino group and shows initiate elasticity modulus after exposure in the range of 5-75 kgf/mm2.

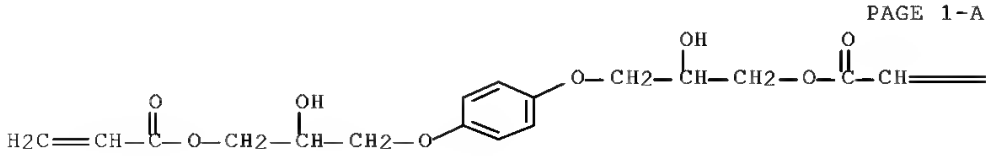
IT **70066-72-7P 70157-37-8P**
(prepared as polymerizable compound for waterless lithog. printing plate master)

RN 70066-72-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 1,1'-[1,4-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)]] ester (CA INDEX NAME)



RN 70157-37-8 HCAPLUS
CN 2-Propenoic acid, 1,4-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)

PAGE 1-A



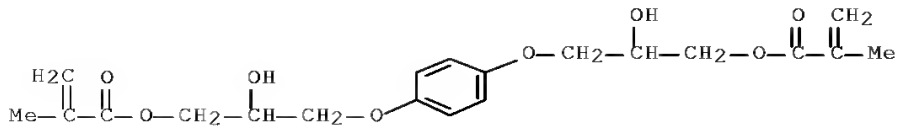
=CH2

IC ICM G03F007-00
ICS G03F007-027; G03F007-11
CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT 5975-68-8P 5975-71-3P 5975-74-6P 9003-35-4DP, glycidyl ether acrylate ester 34890-69-2P 45293-28-5P 51590-42-2P 62732-28-9P **70066-72-7P 70157-37-8P** 76185-15-4P 93402-78-9P 98908-68-0P 182175-84-4P 182175-85-5P 182175-86-6P 182175-87-7P 182175-88-8P 182267-99-8P
(prepared as polymerizable compound for waterless lithog. printing plate master)

L17 ANSWER 26 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1996:622904 HCAPLUS Full-text
DOCUMENT NUMBER: 125:261242
TITLE: Waterless lithographic printing original plate
INVENTOR(S): Kokuni, Masahiro; Ikeda, Norimasa; Kawamura, Ken
PATENT ASSIGNEE(S): Toray Industries, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 37 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

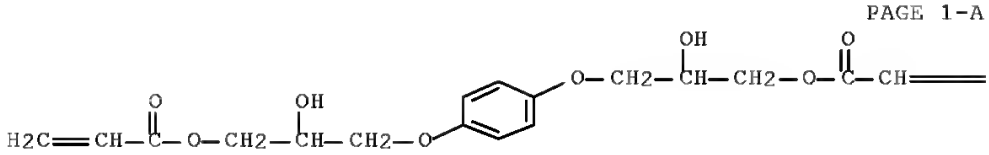
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08184961	A	19960716	JP 1995-202598 <--	19950808
PRIORITY APPLN. INFO.:			JP 1995-202598 A <--	19950808
			JP 1994-269912 <--	19941102

ED Entered STN: 21 Oct 1996
AB The waterless lithog. printing original plate comprises a photosensitive layer and an ink-repelling layer in the order on a support, in which the photosensitive layer contains H2C=CR1(L1)aCR2OH(L2)b (R1,2 = H, halo, C1-100 alkyl, alkoxy, etc.; L1,2 = bonding group; a, b = 0, 1) free of an amino group and an amino-containing monomer. The photosensitive layer after exposure has an initial elastic modulus of 5-75 hgf/mm2.
IT **70066-72-7 70157-37-8**
(waterless lithog. printing original plate)
RN 70066-72-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 1,1'-[1,4-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)]] ester (CA INDEX NAME)



RN 70157-37-8 HCAPLUS
CN 2-Propenoic acid, 1,4-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

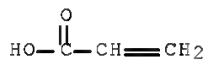
IC ICM G03F007-00
ICS G03F007-027; G03F007-11
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35, 38
IT 75-36-5D, Acetyl chloride, reaction product with trioxypropylenediamine, acrylic acid chloride, glycidyl methacrylate 79-03-8D, Propionic acid chloride, reaction product with vinylglycidyl ether, hexamethylenediamine, glycidyl methacrylate 79-41-4D, reaction product with ethylenediamine, glycidyl methacrylate, butylglycidyl ether, acetic acid chloride 106-91-2D, Glycidyl methacrylate, reaction product with m-xylenediamine and methylglycidyl ether 107-15-3D, 1,2-Ethanediamine, reaction product with methacrylic acid, glycidyl methacrylate, butylglycidyl ether, acetic acid chloride 124-09-4D, 1,6-Hexanediamine, reaction product with vinylglycidyl ether, propionic acid chloride, glycidyl methacrylate 814-68-6D, Acrylic acid chloride, reaction product with trioxypropylenediamine, acetic acid chloride, glycidyl methacrylate 930-37-0D, Methylglycidyl ether, reaction product with m-xylenediamine and glycidyl methacrylate 1477-55-0D, 1,3-Benzenedimethanamine, reaction product with glycidyl methacrylate and methylglycidyl ether 2426-08-6D, reaction product with ethylenediamine, glycidyl methacrylate, methacrylic acid, acetic acid chloride 5975-68-8 5975-71-3 5975-74-6 9003-35-4D, glycidyl ether acrylic-type ester 34890-69-2 45293-28-5 51590-42-2 62732-28-9 **70066-72-7** **70157-37-8** 76185-15-4 93402-78-9 98908-68-0 182175-84-4 182175-85-5 182175-86-6 182175-87-7 182175-88-8

182267-99-8
(waterless lithog. printing original plate)

L17 ANSWER 27 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:739973 HCAPLUS Full-text
DOCUMENT NUMBER: 123:113031
TITLE: Effect of ultraviolet light on a radiation-cured oligomeric composition
AUTHOR(S): Khoromskaya, V. A.; Bydanova, V. V.; Slovokhotova, N. A.; Lomonosova, N. V.; Shiryaeva, G. V.
CORPORATE SOURCE: Karpov Institute of Physical Chemistry, Kaluzhskaya oblast, 249020, Russia
SOURCE: High Energy Chemistry (Translation of Khimiya Vysokikh Energii) (**1995**), 29(4), 265-9
CODEN: HIECAP; ISSN: 0018-1439
PUBLISHER: MAIK Nauka/Interperiodica
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 16 Aug 1995
AB The processes occurring in oligomeric systems under conditions of polymerization and accelerated aging induced by UV light were investigated using the method of IR spectroscopy. Photochem. degradation occurs primarily upon UV-light irradiation of cured epoxy acrylates at the ester groups and results in the formation of peroxyacids. The principal possibility of introducing the stabilizer into the oligomeric composition at the radiation-curing stage was shown. The introduction of benzon OA as a stabilizer is shown to reduce the rate of photodegrdn.
IT **117925-72-1**, EAS 637
(UV effect on radiation-cured oligomeric composition)
RN 117925-72-1 HCAPLUS
CN Oxirane, 2,2'-[1,3-phenylenebis(oxymethylene)]bis-, homopolymer, 2-propenoate (CA INDEX NAME)

CM 1

CRN 79-10-7
CMF C3 H4 O2

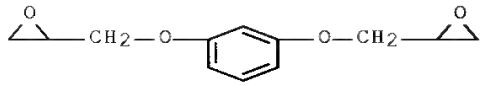


CM 2

CRN 29563-13-1
CMF (C12 H14 O4)x
CCI PMS

CM 3

CRN 101-90-6
CMF C12 H14 O4

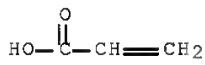


CC 35-8 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 42
IT **117925-72-1**, EAS 637 122157-45-3, EAS 655
(UV effect on radiation-cured oligomeric composition)

L17 ANSWER 28 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:618926 HCAPLUS Full-text
DOCUMENT NUMBER: 123:212850
TITLE: Radiation-curing compositions for resist layers
AUTHOR(S): Shiryaeva, G. V.; Bydanova, V. V.
CORPORATE SOURCE: Obninsk Branch Karpov, Institute Physical Chemistry, Obninsk, 249020, Russia
SOURCE: RadTech Asia '93 UV/EB Conf. Expo., Conf. Proc. (**1993**), 430-4. RadTech Japan: Tokyo, Japan.
CODEN: 61CMAR
DOCUMENT TYPE: Conference
LANGUAGE: English
ED Entered STN: 17 Jun 1995
AB Research and development of radiation-curing binders to be used in resist compns. is described.
IT **117925-72-1**, EAS 637
(radiation-curing compns. for resist layers)
RN 117925-72-1 HCAPLUS
CN Oxirane, 2,2'-[1,3-phenylenebis(oxymethylene)]bis-, homopolymer, 2-propenoate (CA INDEX NAME)

CM 1

CRN 79-10-7
CMF C3 H4 O2

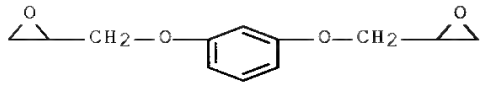


CM 2

CRN 29563-13-1
CMF (C12 H14 O4)x
CCI PMS

CM 3

CRN 101-90-6
CMF C12 H14 O4



CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 36
IT 53814-24-7, EAS 20 91931-93-0, EAS 22 **117925-72-1**, EAS 637
(radiation-curing compns. for resist layers)

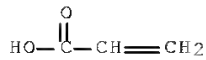
L17 ANSWER 29 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:392367 HCAPLUS Full-text
DOCUMENT NUMBER: 122:252121
TITLE: Resist ink composition
INVENTOR(S): Imazu, Hideki; Hirose, Isamu; Hioki, Masanobu; Yoshimura, Masahiko; Matsui, Makoto
PATENT ASSIGNEE(S): Unitika Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06332169	A	19941202	JP 1993-141551 <--	19930519
PRIORITY APPLN. INFO.:			JP 1993-141551 <--	19930519

ED Entered STN: 04 Mar 1995
AB The resist ink composition comprises (A) unsatd. compound prepared by the reaction of 1,6-diglycidyloxynaphthalene and unsatd. monobasic acid, (B) photohardenable resin prepared by the reaction of (un)saturated polybasic acid anhydride with the reaction product of epoxy compound and unsatd. monobasic acid, (C) photopolymn. initiator, and (D) epoxy compound with ≥2 epoxy group in a mol. at the weight ratio of A/B = (5-30)/(95-70), C/(A+B) = (2-30)/100, and D/B = (10-50)/100. The composition shows high sensitivity, developable with weak alkali solution, water soluble flux resistance, and is useful for solder resist.
IT **162260-66-4P**
(resist ink composition containing unsatd. compound and photohardenable resin
and epoxy compound)
RN 162260-66-4 HCAPLUS
CN Oxirane, 2,2'-[1,6-naphthalenediylbis(oxymethylene)]bis-, homopolymer, 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7
CMF C3 H4 O2

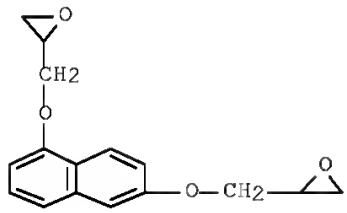


CM 2

CRN 131406-13-8
CMF (C16 H16 O4)x
CCI PMS

CM 3

CRN 27610-48-6
CMF C16 H16 O4



IC ICM G03F007-027
ICS G03F007-027; C08G059-20; C08G059-40; C09D011-10; G03F007-004; G03F007-028; G03F007-032; G03F007-038; H05K003-28
ICA C08F299-02
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 76
IT 129639-53-8P **162260-66-4P**
(resist ink composition containing unsatd. compound and photohardenable resin
and epoxy compound)

L17 ANSWER 30 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:237857 HCAPLUS Full-text
DOCUMENT NUMBER: 122:57643
TITLE: Corrosion-resistant epoxide materials
AUTHOR(S): Kuznetsova, V. M.; Podgornaya, L. F.; Yakovleva, R. A.; Obizhenko, T. N.; Danilyuk, O. A.
CORPORATE SOURCE: Khar'k. Politekh. Inst., Ukraine
SOURCE: Khimicheskaya Promyshlennost (Moscow) (**1994**), (2), 89-91
CODEN: KPRMAW; ISSN: 0023-110X
PUBLISHER: Khimiya
DOCUMENT TYPE: Journal
LANGUAGE: Russian
ED Entered STN: 10 Dec 1994
AB Sealants and adhesives from modified bisphenol A-based epoxy resin ED-20 cold-cured with various polyamines were tested for corrosion resistance by a long-term exposure to metallic Cu in air at normal and 60% RH. The specimens were

also exposed to 125° for 25 days to examine the effect of thermal aging on their dielec. and mech. properties. The specimens performed satisfactorily in both tests.

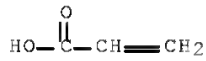
IT **117925-72-1**
(crosslinked; corrosion and thermal aging resistance of modified epoxy resin sealants and adhesives cold-cured with various polyamines)

RN 117925-72-1 HCAPLUS

CN Oxirane, 2,2'-[1,3-phenylenebis(oxymethylene)]bis-, homopolymer, 2-propenoate (CA INDEX NAME)

CM 1

CRN 79-10-7
CMF C3 H4 O2

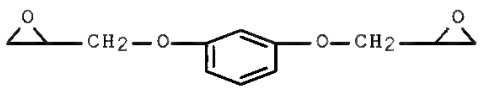


CM 2

CRN 29563-13-1
CMF (C12 H14 O4)x
CCI PMS

CM 3

CRN 101-90-6
CMF C12 H14 O4



CC 38-3 (Plastics Fabrication and Uses)

IT **117925-72-1** 160274-45-3
(crosslinked; corrosion and thermal aging resistance of modified epoxy resin sealants and adhesives cold-cured with various polyamines)

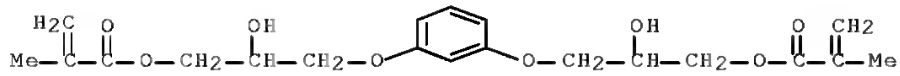
L17 ANSWER 31 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:132324 HCAPLUS Full-text
DOCUMENT NUMBER: 122:64229
TITLE: Novel aromatic dimethacrylate esters as dental resins
AUTHOR(S): Davy, K. W. M.
CORPORATE SOURCE: University of London I.R.C. in Biomedical Materials, The London Hospital Medical College, London, E1 2AD, UK
SOURCE: Journal of Materials Science: Materials in

Medicine (**1994**), 5(6 & 7), 350-2
CODEN: JSMMEL; ISSN: 0957-4530
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 08 Nov 1994

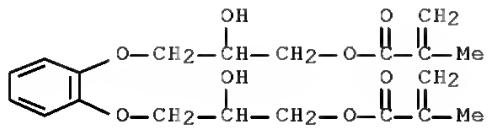
AB The preparation of a novel class of dimethacrylate esters, by the reaction of glycidyl methacrylate with various phthalic acid isomers and their halogen substituted derivs. is described. These monomers exhibited low viscosity, possessed similar phys. and mech. properties to bis GMA, and the presence of halogen introduced x-ray opacity into the polymer giving opacity similar to tooth enamel.

IT **53773-68-5P 160350-28-7P 160350-29-8P**
160350-30-1P 160350-31-2P
(aromatic dimethacrylate esters as dental resins)

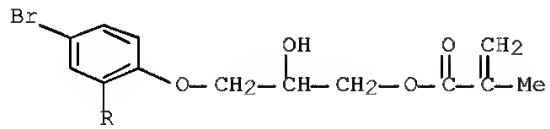
RN 53773-68-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)

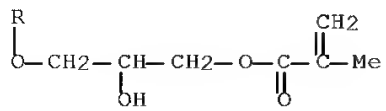


RN 160350-28-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 1,2-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)

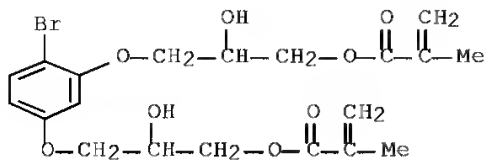


RN 160350-29-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, (4-bromo-1,2-phenylene)bis[oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)

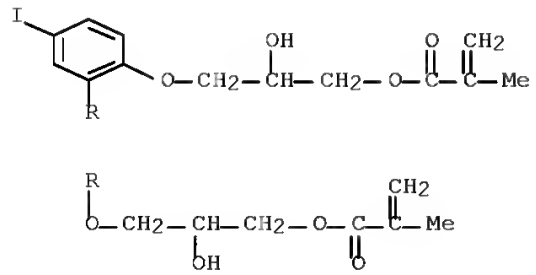




RN 160350-30-1 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, (4-bromo-1,3-phenylene)bis[oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)



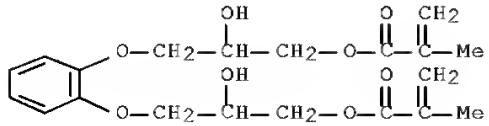
RN 160350-31-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, (4-iodo-1,2-phenylene)bis[oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)



IT **160350-32-3P 160350-33-4P 160350-34-5P**
160350-35-6P 160350-36-7P
(aromatic dimethacrylate esters as dental resins)
RN 160350-32-3 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 1,2-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 160350-28-7
CMF C20 H26 O8

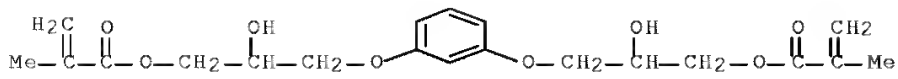


RN 160350-33-4 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 1,3-phenylenebis[oxy(2-hydroxy-3,1-

propanediyl)] ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

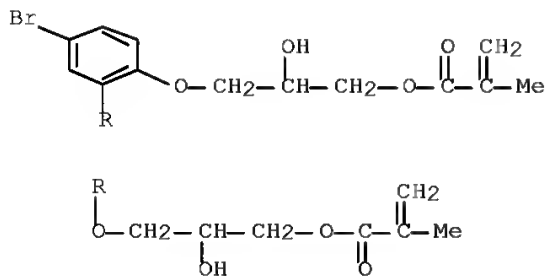
CRN 53773-68-5
CMF C20 H26 O8



RN 160350-34-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, (4-bromo-1,2-phenylene)bis[oxy(2-hydroxy-3,1-propanediyl)] ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

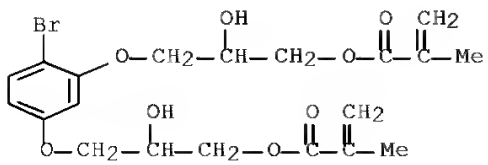
CRN 160350-29-8
CMF C20 H25 Br O8



RN 160350-35-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, (4-bromo-1,3-phenylene)bis[oxy(2-hydroxy-3,1-propanediyl)] ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

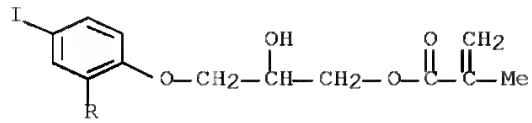
CRN 160350-30-1
CMF C20 H25 Br O8

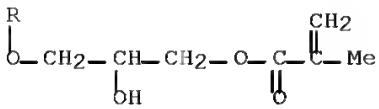


RN 160350-36-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, (4-iodo-1,2-phenylene)bis[oxy(2-hydroxy-3,1-propanediyl)] ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 160350-31-2
CMF C20 H25 I O8



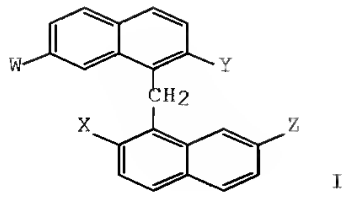


CC 63-7 (Pharmaceuticals)
Section cross-reference(s): 36
IT **53773-68-5P 160350-28-7P 160350-29-8P 160350-30-1P 160350-31-2P**
(aromatic dimethacrylate esters as dental resins)
IT 1565-94-2DP, Bis-GMA, alkoxylated, polymers 26426-05-1P 30757-19-8P, Bis-GMA polymer 73346-78-8P **160350-32-3P 160350-33-4P 160350-34-5P 160350-35-6P 160350-36-7P**
(aromatic dimethacrylate esters as dental resins)

L17 ANSWER 32 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1993:505892 HCAPLUS Full-text
DOCUMENT NUMBER: 119:105892
TITLE: Photo- and radiation-sensitive resist ink composition
INVENTOR(S): Kinoshita, Masayuki; Ishikawa, Hidenori
PATENT ASSIGNEE(S): Dainippon Ink and Chemicals, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04277573	A	19921002	JP 1991-38500 <--	19910305
PRIORITY APPLN. INFO.:			JP 1991-38500 <--	19910305

OTHER SOURCE(S): MARPAT 119:105892
ED Entered STN: 04 Sep 1993
GI



I

AB The title resist composition contains (1) a resin obtained by reacting ≥1 I [W, X, Y, Z = H, glycidyloxy (excludes situation when all are H)] with a compound simultaneously possessing a group(s) capable of reacting with the oxirane group and an unsatd. double bond(s) then with a polybasic acid anhydride, and (2) a photopolymn. initiator. The resist has good light sensitivity, good curing properties, and has superior water, solvent and heat resistance, and is alkali soluble

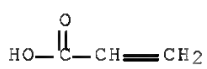
IT **149369-05-1**
(radiation-sensitive resist composition containing)

RN 149369-05-1 HCAPLUS

CN 1,3-Isobenzofurandione, 3a,4,7,7a-tetrahydro-, polymer with 2,2',2'',2'''-[methylenebis[1,2,7-naphthalenetriylbis(oxymethylene)]]tetrakis[oxirane], 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7
CMF C3 H4 O2

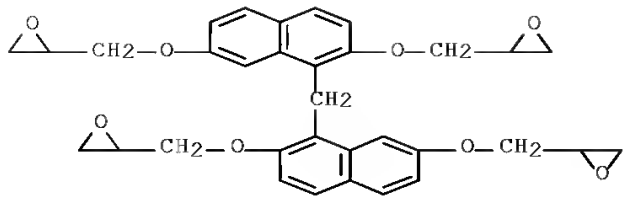


CM 2

CRN 166089-42-5
CMF (C33 H32 O8 . C8 H8 O3)x
CCI PMS

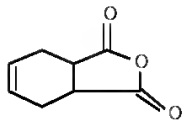
CM 3

CRN 146794-56-1
CMF C33 H32 O8



CM 4

CRN 85-43-8
CMF C8 H8 O3

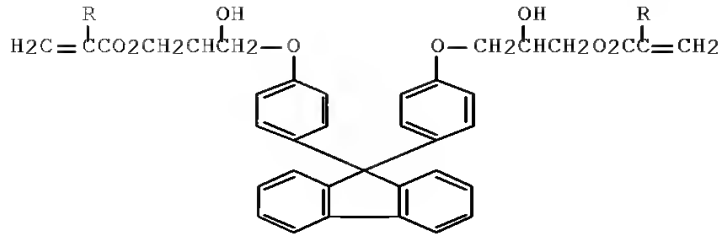


IC ICM C09D011-10
ICS C08G059-18; C08G059-20; C08G059-42; C09D011-00
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT **149369-05-1**
(radiation-sensitive resist composition containing)

L17 ANSWER 33 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1993:498092 HCAPLUS Full-text
DOCUMENT NUMBER: 119:98092
TITLE: UV-curable acrylic compositions for protection of colored optical filters and their cured products
INVENTOR(S): Yokoshima, Minoru; Ishii, Kazuhiko
PATENT ASSIGNEE(S): Nippon Kayaku Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04345608	A	19921201	JP 1991-146603 <--	19910523
PRIORITY APPLN. INFO.:			JP 1991-146603 <--	19910523

OTHER SOURCE(S): MARPAT 119:98092
ED Entered STN: 04 Sep 1993
GI



I

AB The title compns., patternable by lithog. with good heat resistance, comprise I (R = H, Me), compds. containing ethylenic unsatn. with functionality ≥3, and photoinitiators. Thus, a composition of ASF 400 [9,9-bis(3-acryloyloxy-2-hydroxypropoxy)fluorene] 90, Kayarad DPHA 10, Et Cellosolve acetate 400, Irgacure 907 3, and KBM 5103 (silane coupling agent) 1 part was applied to a glass plate by spin coating to 1-3 μm thickness, dried at 70°, irradiated with UV light through a neg. film, developed with CH2Cl2, and heated at 180° to form a film which showed no discoloration when heated at 250° for 1 h and adhesion 100/100 initially and 100/100 after 1-h immersion in boiling water and formed no wrinkles when an ITO film was formed on it.

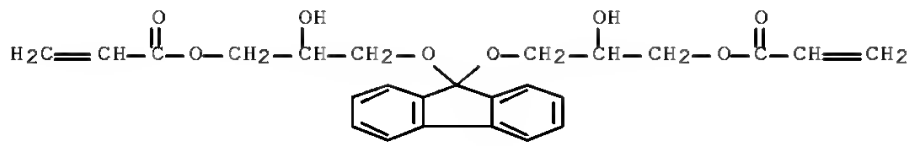
IT **149389-06-0P**
(coatings, UV-cured, preparation of, heat-resistant, for protection of colored optical filters)

RN 149389-06-0 HCAPLUS

CN 2-Propenoic acid, 9H-fluoren-9-ylidenebis[oxy(2-hydroxy-3,1-propanediyl)] ester, polymer with 2,2'-[oxybis(methylene)]bis[2-(hydroxymethyl)-1,3-propanediol] 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 149389-05-9
CMF C25 H26 O8

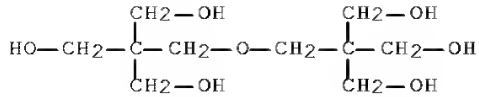


CM 2

CRN 77641-99-7
CMF C10 H22 O7 . x C3 H4 O2

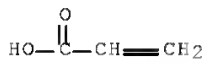
CM 3

CRN 126-58-9
CMF C10 H22 O7



CM 4

CRN 79-10-7
CMF C3 H4 O2

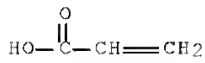


IC ICM C08F220-28
ICS C08F220-30; C08J007-04
ICA G02B005-20; G03F007-004; G03F007-027
CC 42-10 (Coatings, Inks, and Related Products)
IT **149389-06-0P**
(coatings, UV-cured, preparation of, heat-resistant, for protection of colored optical filters)

L17 ANSWER 34 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1991:523710 HCAPLUS Full-text
DOCUMENT NUMBER: 115:123710
TITLE: Polyfunctional meth(acrylate) monomers for photopolymerizing recording and protective layers for optical disks
AUTHOR(S): Zaks, I. N.; Rot, A. S.; Pernikis, R. Ya.; Barachevskii, V. A.
CORPORATE SOURCE: Ukr. Poligr. Inst., Lvov, USSR
SOURCE: Zhurnal Nauchnoi i Prikladnoi Fotografii i Kinematografii (**1991**), 36(3), 226-31
CODEN: ZNPFAG; ISSN: 0044-4561
DOCUMENT TYPE: Journal
LANGUAGE: Russian
ED Entered STN: 23 Sep 1991
AB Physicomech. and optical characteristics are analyzed for a series of polyfunctional (meth)acrylate monomers for application as the components of the photopolymg. compns. for optical recording disks applications. The best properties (low birefringence coefficient, low shrinkage during polymerization) had oligocarbonatomethacrylates with increased functionality. The best photoinitiators for the relief-forming photopolymers were 2,2-diisopropoxy-, and 2,2-di-sec-butoxyacetophenone. The optimal photopolymg. compns. were prepared for a disk as protective-, relief-forming-, and support layers.
IT **117925-72-1**
(photopolymg. compns. for optical recording disks preparation containing, properties of)
RN 117925-72-1 HCAPLUS
CN Oxirane, 2,2'-[1,3-phenylenebis(oxymethylene)]bis-, homopolymer, 2-propenoate (CA INDEX NAME)

CM 1

CRN 79-10-7
CMF C3 H4 O2

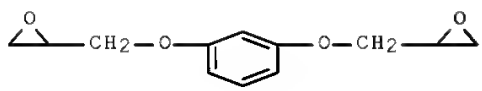


CM 2

CRN 29563-13-1
CMF (C12 H14 O4)x
CCI PMS

CM 3

CRN 101-90-6
CMF C12 H14 O4



CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT 1070-70-8 4074-88-8 13048-33-4 24448-20-2 **117925-72-1**
122157-45-3, EAS 655 133346-14-2 133346-15-3
(photopolymg. compns. for optical recording disks preparation containing, properties of)

L17 ANSWER 35 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1991:103437 HCAPLUS Full-text
DOCUMENT NUMBER: 114:103437
TITLE: Effect of epoxy acrylate nature on properties of photopolymerizing compositions
AUTHOR(S): Neroznik, V. G.; Mikh, T. F.; Burmenko, A. S.
CORPORATE SOURCE: UkrNIIplastmass, USSR
SOURCE: Lakokrasochnye Materialy i Ikh Primenenie (**1989**), (6), 46-8
CODEN: LAMAAD; ISSN: 0023-737X
DOCUMENT TYPE: Journal
LANGUAGE: Russian
ED Entered STN: 23 Mar 1991
AB Compns. based on the epoxy acrylates EAS-637, EAS-671, and EAS-DGF (synthesized from epoxy resins UP-637, UP-671, and DGF-25, resp.), and containing 2-hydroxy-3-chloropropyl acrylate (I) as an active diluent were prepared. The epoxy acrylate compns. exhibited high photopolymn. activity under UV irradiation, and the strength and elasticity of the cured compns. suggested their suitablility for protection and sealing of electronic parts.

The properties of the EAS-I compns. can be controlled by varying the nature of the epoxy acrylate and by changing the I concentration in the composition

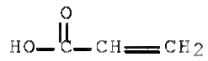
IT **132324-47-1**
(photocurable compns. containing, properties of, effect of reactive diluent concentration on)

RN 132324-47-1 HCAPLUS

CN Oxirane, 2,2'-[1,3-phenylenebis(oxymethylene)]bis-, homopolymer, di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7
CMF C3 H4 O2

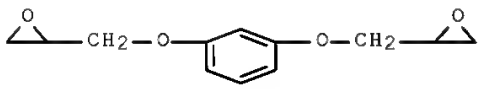


CM 2

CRN 29563-13-1
CMF (C12 H14 O4)x
CCI PMS

CM 3

CRN 101-90-6
CMF C12 H14 O4



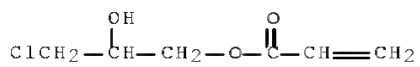
IT **132485-85-9P**
(preparation and properties of photocured)

RN 132485-85-9 HCAPLUS

CN 2-Propenoic acid, 3-chloro-2-hydroxypropyl ester, polymer with 2,2'-[1,3-phenylenebis(oxymethylene)]bisoxirane homopolymer di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 3326-90-7
CMF C6 H9 Cl O3

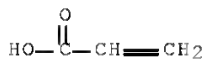


CM 2

CRN 132324-47-1
CMF (C12 H14 O4)x . 2 C3 H4 O2

CM 3

CRN 79-10-7
CMF C3 H4 O2

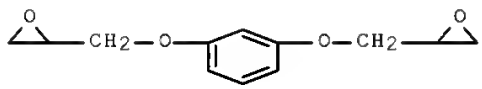


CM 4

CRN 29563-13-1
CMF (C12 H14 O4)x
CCI PMS

CM 5

CRN 101-90-6
CMF C12 H14 O4



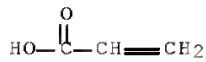
CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 42
IT 53814-21-4 132323-40-1 **132324-47-1**
(photocurable compns. containing, properties of, effect of reactive diluent concentration on)
IT 132485-78-0P 132485-79-1P **132485-85-9P**
(preparation and properties of photocured)

L17 ANSWER 36 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:592453 HCAPLUS Full-text
DOCUMENT NUMBER: 113:192453
TITLE: Gel chromatographic study of formation of epoxy acrylic compounds
AUTHOR(S): Neroznik, V. G.; Burmenko, A. S.; Yarovaya, E. P.
CORPORATE SOURCE: Ukr. Nauchno-Issled. Inst. Plast. Mass, USSR
SOURCE: Vysokomolekulyarnye Soedineniya, Seriya B: Kratkie Soobshcheniya (**1990**), 32(7), 514-16
CODEN: VYSBAI; ISSN: 0507-5483
DOCUMENT TYPE: Journal

LANGUAGE: Russian
ED Entered STN: 23 Nov 1990
AB Reaction of resorcinol diglycidyl ether (I) with acrylic acid (II) occurred with sequential addition of II to each of the epoxy groups of I with formation of resorcinol diglycidyl ether monoacrylate (III) as an intermediate product. The final product contained resorcinol diglycidyl ether diacrylate 77, III 5-10, and oligomeric byproducts (d.p. 2-6) 18-20%. The oligomeric byproducts were formed in the beginning of the esterification at high I concentration
IT **117925-72-1P 130287-34-2P**, Resorcinol diglycidyl ether monoacrylate
(formation of, in esterification of resorcinol diglycidyl ether with acrylic acid)
RN 117925-72-1 HCAPLUS
CN Oxirane, 2,2'-[1,3-phenylenebis(oxymethylene)]bis-, homopolymer, 2-propenoate (CA INDEX NAME)

CM 1

CRN 79-10-7
CMF C3 H4 O2

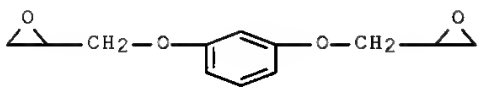


CM 2

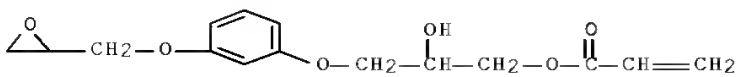
CRN 29563-13-1
CMF (C12 H14 O4)x
CCI PMS

CM 3

CRN 101-90-6
CMF C12 H14 O4

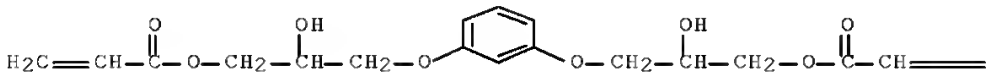


RN 130287-34-2 HCAPLUS
CN 2-Propenoic acid, 2-hydroxy-3-[3-(oxiranylmethoxy)phenoxy]propyl ester (9CI) (CA INDEX NAME)



IT **126659-18-5P**, Resorcinol diglycidyl ether diacrylate
(preparation of, from resorcinol diglydicyl ether and acrylic acid, side reactions and byproducts in)
RN 126659-18-5 HCAPLUS
CN 2-Propenoic acid, 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

$=CH_2$

CC 37-2 (Plastics Manufacture and Processing)
IT **117925-72-1P 130287-34-2P**, Resorcinol diglycidyl ether monoacrylate
(formation of, in esterification of resorcinol diglycidyl ether with acrylic acid)
IT **126659-18-5P**, Resorcinol diglycidyl ether diacrylate
(preparation of, from resorcinol diglydicyl ether and acrylic acid, side reactions and byproducts in)

L17 ANSWER 37 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:592152 HCAPLUS Full-text
DOCUMENT NUMBER: 113:192152
TITLE: Preparation and polymerization of calixarene derivatives
INVENTOR(S): Ito, Osamu; Taniguchi, Hisaji
PATENT ASSIGNEE(S): Wakayama Prefecture, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02124850	A	19900514	JP 1988-277632 <--	19881101
JP 05088695	B	19931224		
PRIORITY APPLN. INFO.:			JP 1988-277632 <--	19881101

ED Entered STN: 23 Nov 1990
GI For diagram(s), see printed CA Issue.

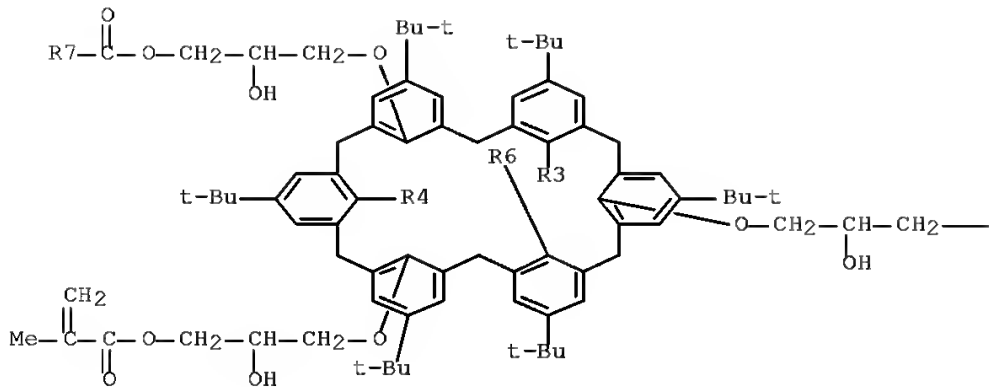
AB Polymers prepared from I (n ≥ 3; R1 = alkyl; R2 = H or alkyl) have good mech. properties, heat, and chemical resistance. Thus, heating I (n = 6; R1 = tert-Bu) 0.4, Me methacrylate 1.6, and Bz2O2 0.02 g at 80° for 2 h gave a polymer having heat decomposition temperature 274° and glass transition temperature 172°.

IT **129936-46-5P**
(preparation and polymerization of)

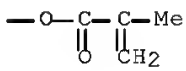
RN 129936-46-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, [5,11,17,23,29,35-hexakis(1,1-dimethylethyl)heptacyclo[31.3.1.13,7.19,13.115,19.121,25.127,31]dotetraconta-1(37),3,5,7(42),9,11,13(41),15,17,19(40),21,23,25(39),27,29,31(38),33,38-octadecaene-37,38,39,40,41,42-hexayl]hexakis[oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)

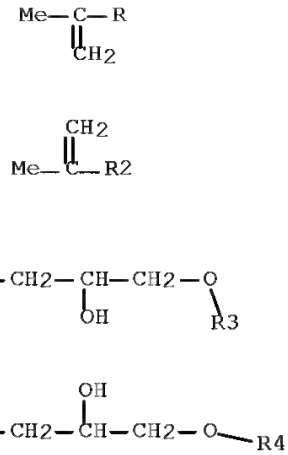
PAGE 1-A



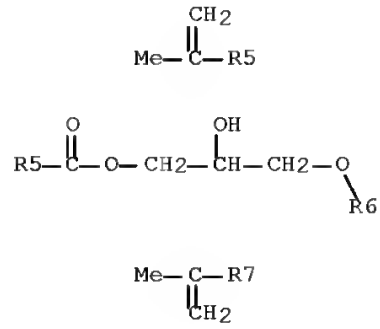
PAGE 1-B



PAGE 2-A



PAGE 3-A



IT **129936-47-6P 129936-48-7P 129936-49-8P**
129936-50-1P 129936-51-2P 129936-52-3P
129936-53-4P 129936-54-5P 129936-55-6P
(preparation of, heat-resistant)

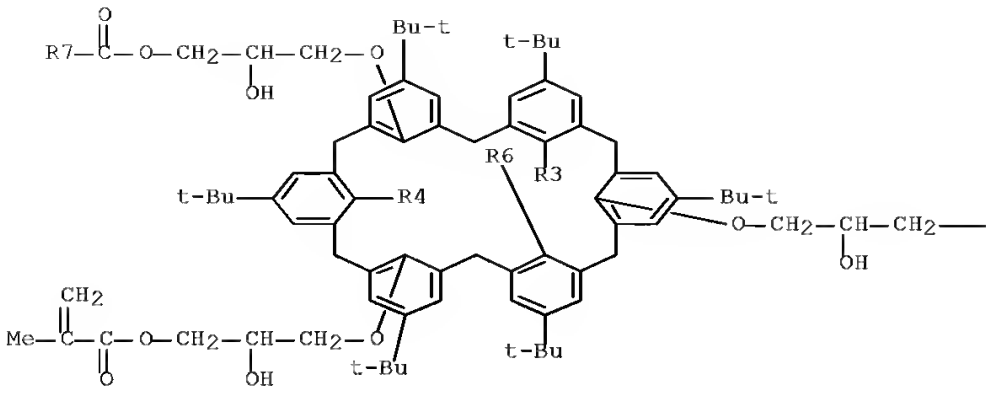
RN 129936-47-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, [5,11,17,23,29,35-hexakis(1,1-dimethylethyl)heptacyclo[31.3.1.13,7.19,13.115,19.121,25.127,31]dotetraconta-1(37),3,5,7(42),9,11,13(41),15,17,19(40),21,23,25(39),27,29,31(38),33,38-octadecaene-37,38,39,40,41,42-hexayl]hexakis[oxy(2-hydroxy-3,1-propanediyl)] ester, polymer with methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

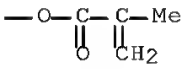
CM 1

CRN 129936-46-5
CMF C108 H144 O24

PAGE 1-A



PAGE 1-B



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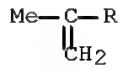
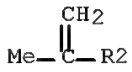
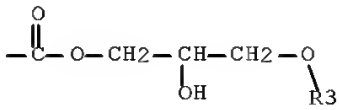
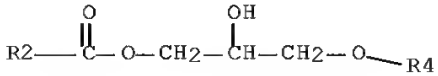
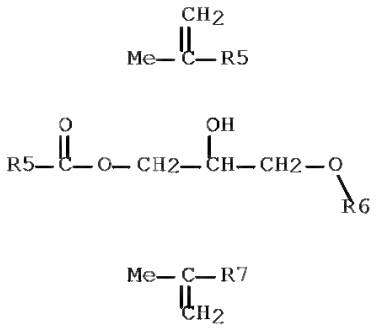






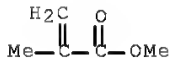


PAGE 3-A



CM 2

CRN 80-62-6
CMF C5 H8 O2

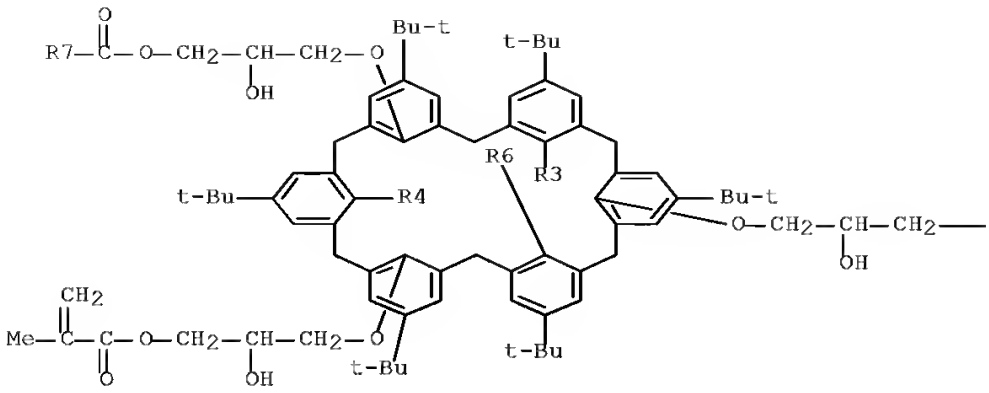


RN 129936-48-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, [5,11,17,23,29,35-hexakis(1,1-dimethylethyl)heptacyclo[31.3.1.13,7.19,13.115,19.121,25.127,31]dotetraconta-1(37),3,5,7(42),9,11,13(41),15,17,19(40),21,23,25(39),27,29,31(38),33,38-octadecaene-37,38,39,40,41,42-hexayl]hexakis[oxy(2-hydroxy-3,1-propanediyl)] ester, polymer with ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 129936-46-5
CMF C108 H144 O24

PAGE 1-A



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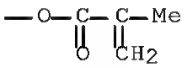

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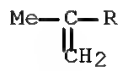
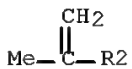
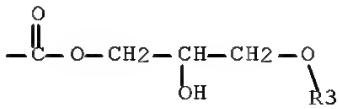
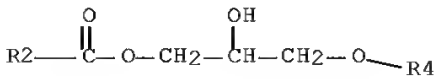
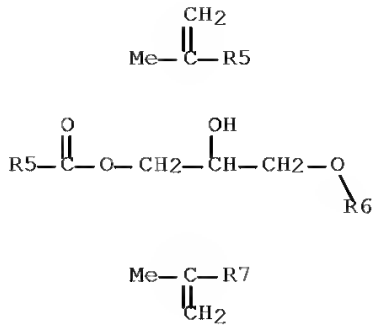




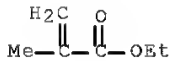






CM 2

CRN 97-63-2
CMF C6 H10 O2



RN 129936-49-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, [5,11,17,23,29,35-hexakis(1,1-dimethylethyl)heptacyclo[31.3.1.13,7.19,13.115,19.121,25.127,31]dotetraconta-1(37),3,5,7(42),9,11,13(41),15,17,19(40),21,23,25(39),27,29,31(38),33,38-octadecaene-37,38,39,40,41,42-hexayl]hexakis[oxy(2-hydroxy-3,1-propanediyl)] ester, polymer with butyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 129936-46-5
CMF C108 H144 O24

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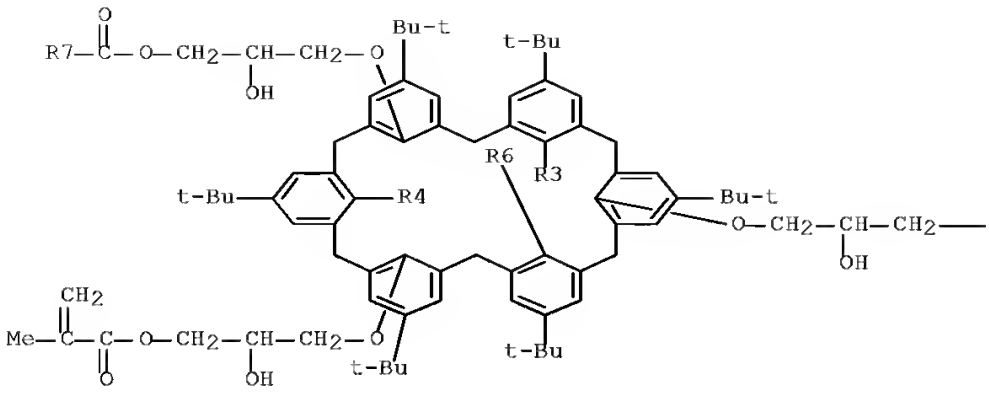

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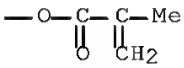

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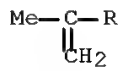
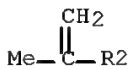
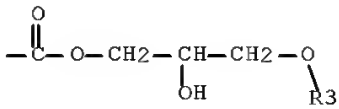
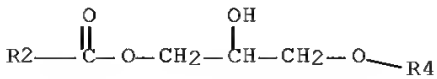
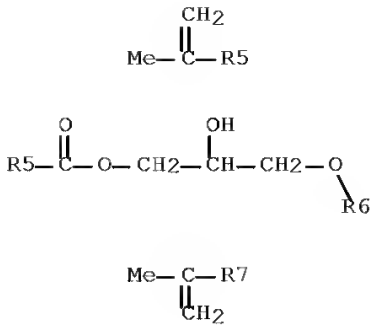






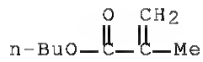


PAGE 3-A



CM 2

CRN 97-88-1
CMF C8 H14 O2



RN 129936-50-1 HCAPLUS
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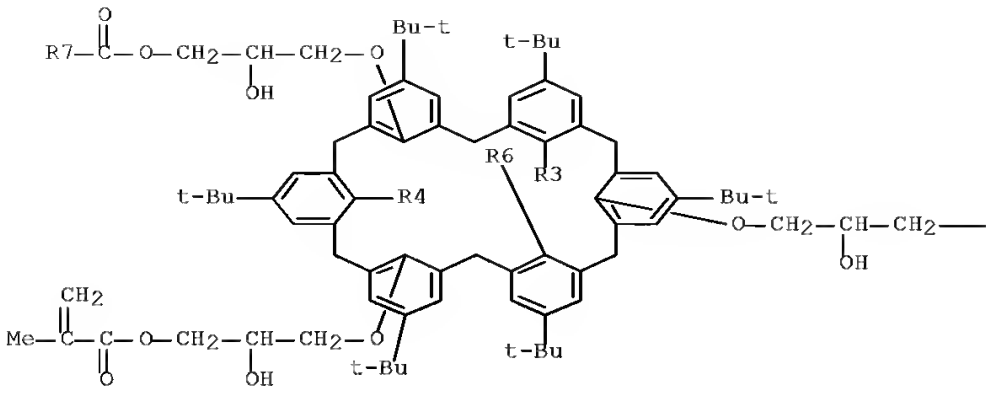
CM 1

CRN 129936-46-5
CMF C108 H144 O24

PAGE 1-A



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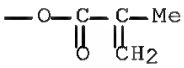

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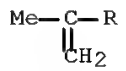

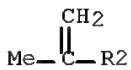

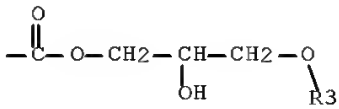

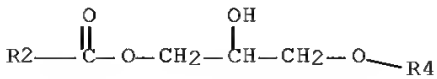

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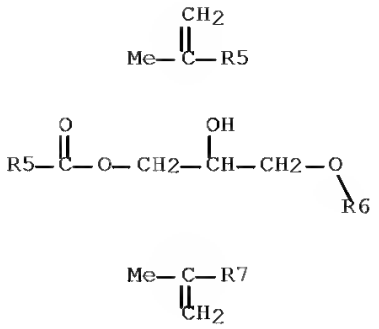
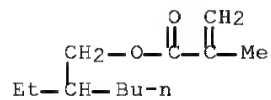


CM 2

CRN 688-84-6
CMF C12 H22 O2



RN 129936-51-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, [5,11,17,23,29,35-hexakis(1,1-dimethylethyl)heptacyclo[31.3.1.13,7.19,13.115,19.121,25.127,31]dotetraconta-1(37),3,5,7(42),9,11,13(41),15,17,19(40),21,23,25(39),27,29,31(38),33,38-octadecaene-37,38,39,40,41,42-hexayl]hexakis[oxy(2-hydroxy-3,1-propanediyl)] ester, polymer with 1-methylethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 129936-46-5
CMF C108 H144 O24

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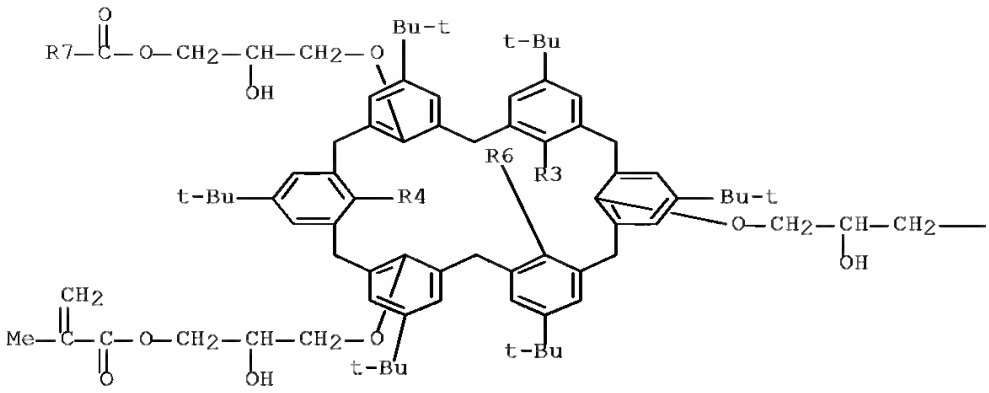

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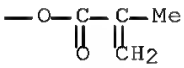

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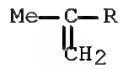

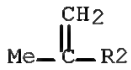

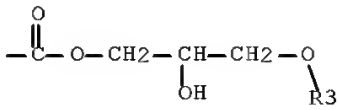

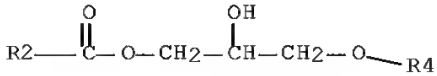

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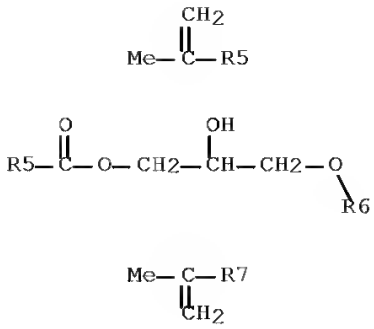
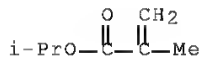


CM 2

CRN 4655-34-9
CMF C7 H12 O2



RN 129936-52-3 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, [5,11,17,23,29,35-hexakis(1,1-dimethylethyl)heptacyclo[31.3.1.13,7.19,13.115,19.121,25.127,31]dotetraconta-1(37),3,5,7(42),9,11,13(41),15,17,19(40),21,23,25(39),27,29,31(38),33,38-octadecaene-37,38,39,40,41,42-hexayl]hexakis[oxy(2-hydroxy-3,1-propanediyl)] ester, polymer with 1,1-dimethylethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 129936-46-5
CMF C108 H144 O24

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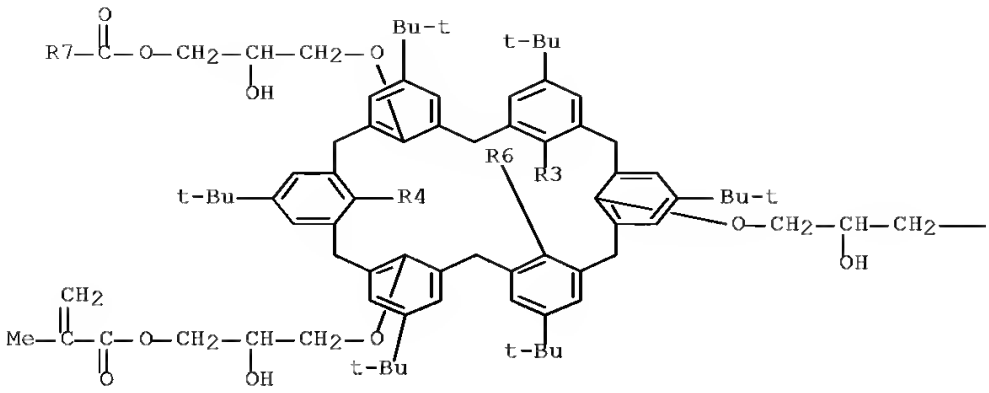

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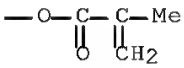

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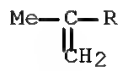

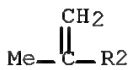

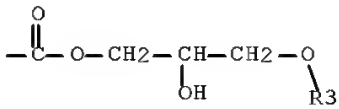

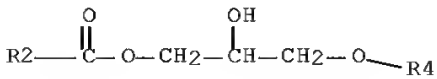

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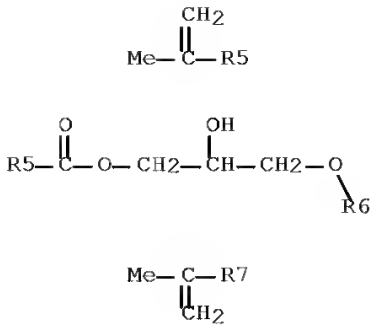
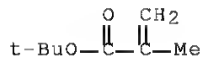


CM 2

CRN 585-07-9
CMF C8 H14 O2



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CM 1

CRN 129936-46-5
CMF C108 H144 O24

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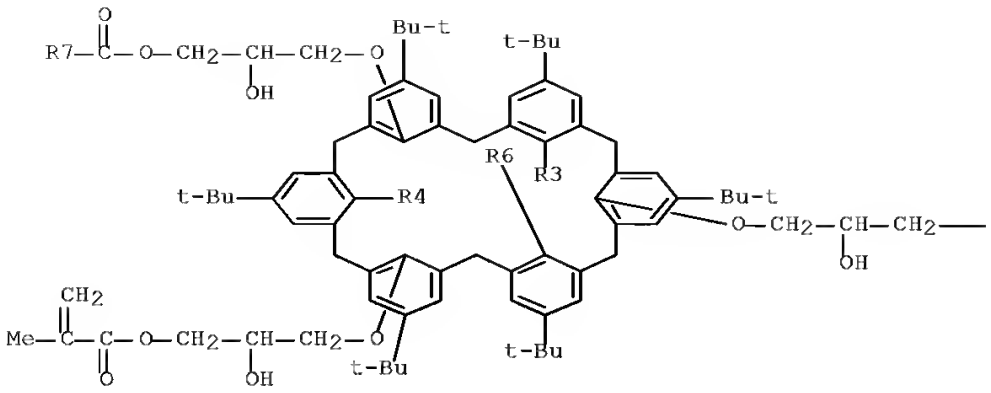

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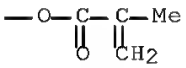

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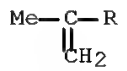

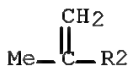

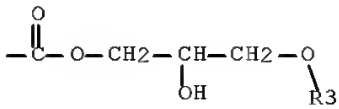

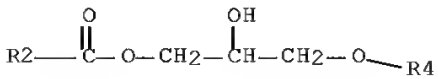

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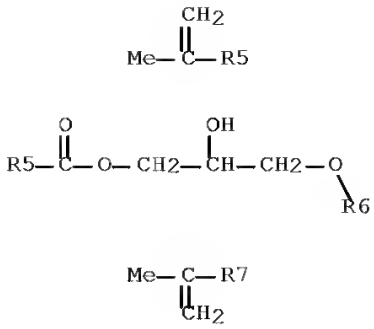
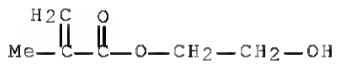


CM 2

CRN 868-77-9
CMF C6 H10 O3



RN 129936-54-5 HCAPLUS
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CM 1

CRN 129936-46-5
CMF C108 H144 O24

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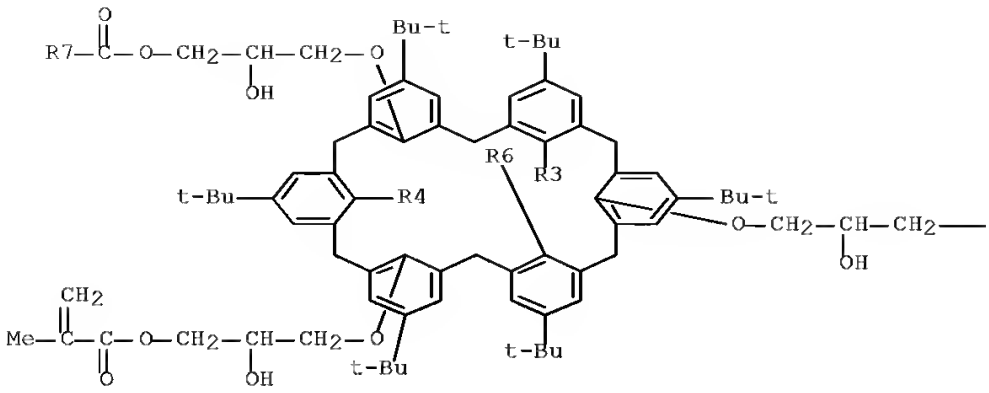

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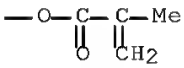

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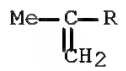

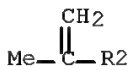

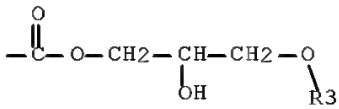

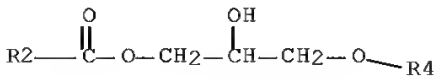

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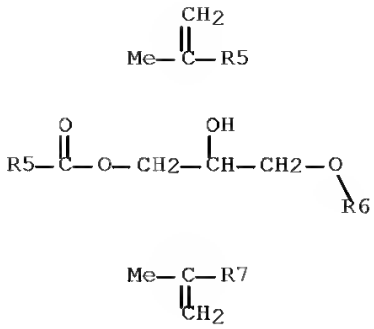
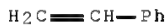


CM 2

CRN 100-42-5
CMF C8 H8



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CM 1

CRN 129936-46-5
CMF C108 H144 O24

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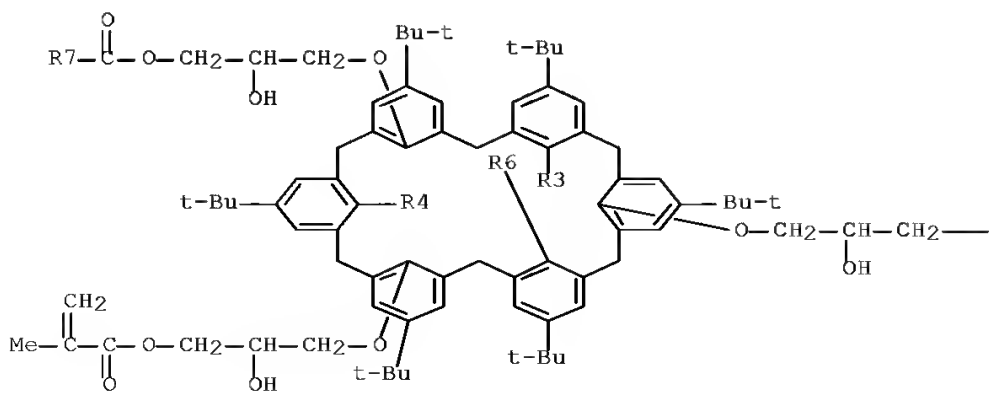
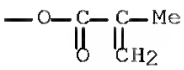
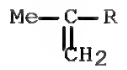
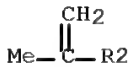


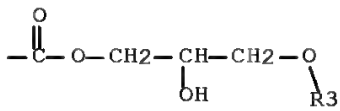
PAGE 1-B

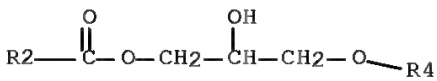


PAGE 2-A

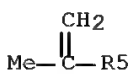


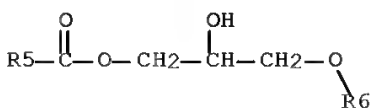


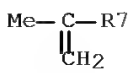




PAGE 3-A

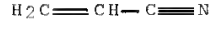






CM 2

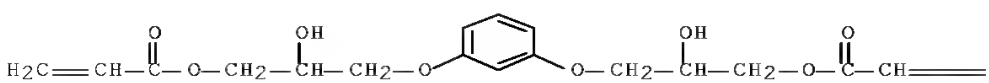
CRN 107-13-1
CMF C3 H3 N



IC ICM C07C069-54
ICS C08F220-10; C08F220-30; C08F299-00
CC 35-4 (Chemistry of Synthetic High Polymers)
IT **129936-46-5P**
(preparation and polymerization of)
IT **129936-47-6P 129936-48-7P 129936-49-8P**
129936-50-1P 129936-51-2P 129936-52-3P
129936-53-4P 129936-54-5P 129936-55-6P
(preparation of, heat-resistant)

L17 ANSWER 38 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:516347 HCAPLUS Full-text
DOCUMENT NUMBER: 113:116347
TITLE: Synthesis and properties of epoxy acrylates based on diglycidyl ether of resorcinol
AUTHOR(S): Neroznik, V. G.; Burmenko, A. S.; Karpov, O. N.
CORPORATE SOURCE: USSR
SOURCE: Plasticheskie Massy (1990), (4), 19-22
CODEN: PLMSAI; ISSN: 0554-2901
DOCUMENT TYPE: Journal
LANGUAGE: Russian
ED Entered STN: 29 Sep 1990
AB Esterification of acrylic acid (I) with resorcinol diglycidyl ether (II) at 100° for 12 h in the absence of a catalyst led to formation of the corresponding acrylate in a relatively low (≤65%) yield. The reaction was 1st order and the reaction rate was 8.6 + 10 -6 L/mol-s. Esterification of I with II or epichlorohydrin-resorcinol oligomer at elevated temperature for 8-10 h in the presence of 2,4,6-tris(dimethylaminomethyl)phenol (III) led to formation of the corresponding acrylates in .apprx.94-96% yield. Although the theor. order of the reaction in the presence of III was 1, exptl. data did not support this. This finding was explained by simultaneous occurrence of esterification reactions according to 1st and 2nd order kinetics. The obtained epoxy acrylates were characterized by IR spectroscopy and NMR.
IT **126659-18-5P**
(preparation and structure of)
RN 126659-18-5 HCAPLUS
CN 2-Propenoic acid, 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)

PAGE 1-A



$=CH_2$

CC 37-3 (Plastics Manufacture and Processing)
IT 87659-20-9P **126659-18-5P**
(preparation and structure of)

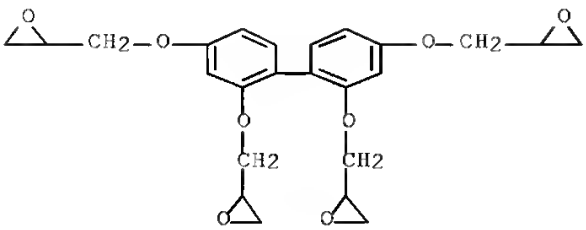
L17 ANSWER 39 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:499042 HCAPLUS Full-text
DOCUMENT NUMBER: 113:99042
TITLE: Solvent-based pressure-sensitive acrylic adhesives crosslinked with epoxy and aziridinyl compounds
INVENTOR(S): Koide, Masashi
PATENT ASSIGNEE(S): Toyo Ink Mfg. Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02070780	A	19900309	JP 1988-222992 <--	19880906
JP 07094649	B	19951011		
PRIORITY APPLN. INFO.:			JP 1988-222992 <--	19880906

ED Entered STN: 16 Sep 1990
AB Two-liquid title compns. which show adequate pot life after mixing but cure rapidly to form adhesives which are little affected by prolonged heating contain acrylic copolymers 100, aziridinyl compds. 0.01-10.0, and epoxides 0.01-10.0 parts. The acrylic copolymers are prepared by polymerizing C4-12 alkyl (meth)acrylates 60-99.8, unsatd. carboxylic acids 0.2-10, and other vinyl monomers 0-39.8% in organic solvents. Thus, 2-ethylhexyl acrylate 47.0, Bu acrylate 33.0, vinyl acetate 19.0, and acrylic acid 1.0 part were polymerized in EtOAc using Bz2O2 to give a 35% polymer solution, 100 parts of which was blended with 1.0 part Epikote 828 and 0.3 part trimethylolpropane tris(aziridinylpropionate) to give a composition with viscosity 1500 cP initially, and 1900 cP after 8 h at 40°. When this composition was spread on a polyester film, it cured in 3 days even at 0°, and the coated film showed adhesion (to stainless steel) 300 g/25 mm initially and 305 g/25 mm after 1 mo at >70°, vs. 380 and 650 g/25 mm, resp., without the Epikote 828.
IT **128888-08-4P**
(preparation of, as pressure-sensitive adhesives insensitive to prolonged heating)
RN 128888-08-4 HCAPLUS
CN 2-Propenoic acid, polymer with 2,2',2'',2'''-[[1,1'-biphenyl]-2,2',4,4'-tetrayltetrakis(oxymethylene)]tetrakis[oxirane], butyl 2-propenoate, 2-ethylhexyl 2-propenoate and 1,1'-(1,3-phenylenedicarbonyl)bis[2-methylaziridine] (9CI) (CA INDEX NAME)

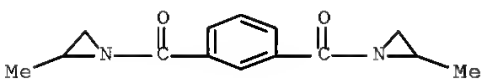
CM 1

CRN 24935-83-9
CMF C24 H26 O8



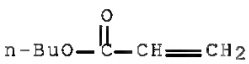
CM 2

CRN 7652-64-4
CMF C14 H16 N2 O2



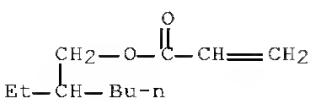
CM 3

CRN 141-32-2
CMF C7 H12 O2



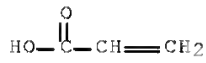
CM 4

CRN 103-11-7
CMF C11 H20 O2



CM 5

CRN 79-10-7
CMF C3 H4 O2

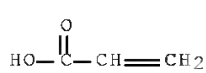


IC ICM C09J133-04
CC 38-3 (Plastics Fabrication and Uses)
IT 128888-07-3P **128888-08-4P** 128888-09-5P
(preparation of, as pressure-sensitive adhesives insensitive to prolonged heating)

L17 ANSWER 40 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:498655 HCAPLUS Full-text
DOCUMENT NUMBER: 113:98655
TITLE: Oxidative thermal degradation and stabilization of radiation-cured polymers
AUTHOR(S): Kuznetsova, V. M.; Tokar, M. I.; Danilyuk, O. A.; Skripko, L. A.; Trostyanetskaya, V. L.
CORPORATE SOURCE: USSR
SOURCE: Plasticheskie Massy **(1990)**, (3), 44-6
CODEN: PLMSAI; ISSN: 0554-2901
DOCUMENT TYPE: Journal
LANGUAGE: Russian
ED Entered STN: 16 Sep 1990
AB Oxidative thermal degradation of acrylated resorcinol diglycidyl ether, stabilized with aromatic amines and oligomeric products of polyfunctional action, such as PF-3 and PF-7 acrylic polymers were used as antioxidants, was studied. The most effective stabilizers were PF-3 and PF-7 antioxidants, the presence of which in unsatd. epoxydized oligomers increased the degradation activation energy from 83 kg/mol. for unstabilized polymer to 118.5 and 120 kg/mol. for PF-3 and PF-7 antioxidant stabilized polymer, resp. The physicomech. and dielec. properties of polymers stabilized with 0.5% amine and polyfunctional type stabilizers during aging at 150° were preserved for extended periods of time.
IT **117925-72-1**
(antioxidants for, aromatic amines and polyfunctional arylic polymers as)
RN 117925-72-1 HCAPLUS
CN Oxirane, 2,2'-[1,3-phenylenebis(oxymethylene)]bis-, homopolymer, 2-propenoate (CA INDEX NAME)

CM 1

CRN 79-10-7
CMF C3 H4 O2

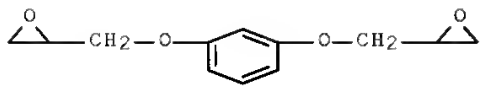


CM 2

CRN 29563-13-1
CMF (C12 H14 O4)x
CCI PMS

CM 3

CRN 101-90-6
CMF C12 H14 O4

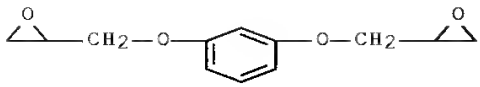


CC 37-6 (Plastics Manufacture and Processing)
IT **117925-72-1**
(antioxidants for, aromatic amines and polyfunctional arylic polymers as)

L17 ANSWER 41 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:441808 HCAPLUS Full-text
DOCUMENT NUMBER: 113:41808
TITLE: Synthesis of divinyl compounds from dihydroxybenzenes
AUTHOR(S): Blinova, M. P.; Tastanov, K. Kh.; Prodius, L. N.; Ergozhin, E. E.
CORPORATE SOURCE: Inst. Khim. Nauk, Alma-Ata, USSR
SOURCE: Izvestiya Akademii Nauk Kazakhskoi SSR, Seriya Khimicheskaya (**1990**), (2), 66-70
CODEN: IKAKAK; ISSN: 0002-3205
DOCUMENT TYPE: Journal
LANGUAGE: Russian
ED Entered STN: 03 Aug 1990
AB Polymerization of resorcinol diglycidyl ether (I) with acrylic acid (II) in the presence of Et3N catalyst and hydroquinone inhibitor was used for the preparation of divinyl derivs., and their physicochem. characteristics were determined Methods of functional and elemental anal., IR spectroscopy and potentiometric titration were used to determine the proposed polymer structure. The synthesized copolymers were used for the preparation of ion exchangers. Optimum conditions for synthesis of I-II copolymer with vinyl end groups were determined for an 80% yield of these oligomers.
IT **25154-93-2P**
(preparation and physicomech. properties of)
RN 25154-93-2 HCAPLUS
CN 2-Propenoic acid, polymer with 2,2'-[1,3-phenylenebis(oxymethylene)]bis[oxirane] (9CI) (CA INDEX NAME)

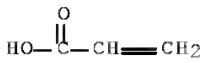
CM 1

CRN 101-90-6
CMF C12 H14 O4



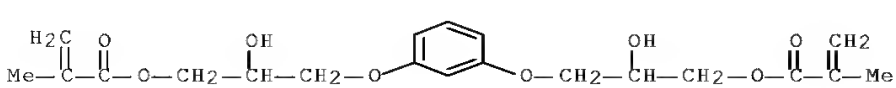
CM 2

CRN 79-10-7
CMF C3 H4 O2



CC 37-3 (Plastics Manufacture and Processing)
IT **25154-93-2P**
(preparation and physicomech. properties of)

L17 ANSWER 42 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:234557 HCAPLUS Full-text
DOCUMENT NUMBER: 112:234557
TITLE: Kinetics of quaternary ammonium salt catalyzed reaction between resorcinol diglycidyl ether and methacrylic acid
AUTHOR(S): Gao, Jungang; Du, Huiling; Sun, Henan
CORPORATE SOURCE: Dep. Chem., Hebei Univ., Baoding, Peop. Rep. China
SOURCE: Cuihua Xuebao (**1989**), 10(4), 422-8
CODEN: THHPD3; ISSN: 0253-9837
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
ED Entered STN: 23 Jun 1990
AB The title reaction is first order with respect to the epoxy group, zero order with respect to methacrylic acid, and 0.71 order with respect to the quaternary ammonium salt catalyst. When the catalyst concentration is 0.02439 N/L and the reactants concentration is 2.349 N/L, the rate consts. and activation energy are determined The mechanism of this reaction is also proposed.
IT **53773-68-5P**
(preparation of)
RN 53773-68-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)



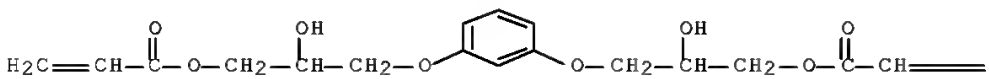
CC 22-4 (Physical Organic Chemistry)
IT **53773-68-5P**
(preparation of)

L17 ANSWER 43 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:199796 HCAPLUS Full-text
DOCUMENT NUMBER: 112:199796
TITLE: Thermal stability of radiation-cured epoxyacrylate polymers
AUTHOR(S): Danilyuk, O. A.; Kuznetsova, V. M.; Tokar, M. I.; Zadontsev, B. G.; Neroznik, V. G.; Burmenko, A. S.
CORPORATE SOURCE: USSR
SOURCE: Plasticheskie Massy (**1989**), (11), 56-8
CODEN: PLMSAI; ISSN: 0554-2901
DOCUMENT TYPE: Journal
LANGUAGE: Russian
ED Entered STN: 26 May 1990
AB The effect of chemical structure and functionality of oligomers, monomers, and modifying additives on thermal stability of radiochem. cured epoxy-acrylate polymers was studied. The radiochem. cured epoxy-acrylate composites can be used as sealants and impregnating materials. The epoxy-acrylate polymers were made from acrylated and methacrylated bisphenol A diglycidyl ether, resorcinol diglycidyl ether, p-hydroxybenzoic acid glycidyl ester, phthalic acid diglycidyl ester, polyepichlorohydrin diglycidyl ether, tetrabromodiphenylolpropane diglycidyl ether, and N,N-glycidyltetrabromoaniline. Technol. properties were controlled by monomeric cresyl glycidyl ether acrylate, Bu glycidyl ether acrylate, triethylene glycol dimethacrylate, organosilicon blend copolymer, and 1-acryloyl-3-butoxy-2-Pr phosphate.
IT **126659-19-6**
(radiochem. curing, thermal stability in relation to)
RN 126659-19-6 HCAPLUS
CN 2-Propenoic acid, 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 126659-18-5
CMF C18 H22 O8

PAGE 1-A



PAGE 1-B

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CC 37-6 (Plastics Manufacture and Processing)

IT 30939-34-5 33041-41-7 103964-33-6 103964-34-7 109479-99-4
126659-17-4 **126659-19-6** 126659-21-0 126673-85-6
126860-46-6
(radiochem. curing, thermal stability in relation to)

L17 ANSWER 44 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:57823 HCAPLUS Full-text
DOCUMENT NUMBER: 112:57823
TITLE: Adhesive compositions for flexible printed circuit boards
INVENTOR(S): Yamamoto, Kunihiko
PATENT ASSIGNEE(S): Mitsui Toatsu Chemicals, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

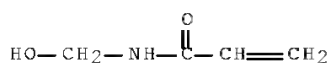
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01158088	A	19890621	JP 1987-307486 <--	19871207
JP 2545419	B2	19961016		

PRIORITY APPLN. INFO.: JP 1987-244949 A1 19870929 <--

ED Entered STN: 17 Feb 1990
AB Title compns. with low tackiness, good solder heat resistance and insulating properties, and long pot life contain aqueous acrylic polymer solns. prepared by polymerizing acrylonitrile and/or styrene, (meth)acrylate esters, acrylic acids and/or acrylamides, and hydroxyalkyl (meth)acrylates in H2O in the presence of epoxides. Acrylonitrile 25, styrene 10, 2-ethylhexyl acrylate 54, methacrylic acid 1, acrylamide 2, 2-hydroxyethyl acrylate 4, and YDPN 638 4 parts were polymerized in H2O in the presence of K2S2O8 at 70° and neutralized to give a copolymer solution (50% solids). A Kapton film was coated with the solution, dried, semicured, and laminated with an OPP film to give a cover lay sheet. Another Kapton film coated with the solution was laminated with a Cu foil to give a flexible laminate which was hot pressed with the cover lay sheet to give a test piece having volume resistivity 1.5 + 1012 Ω and adhesive peel strength 1.5 and 1.3 kg/cm, resp., before and after 240 h at 105°.
IT **124767-81-3**
(adhesives, solder-resistant, insulating, for flexible circuit boards)
RN 124767-81-3 HCAPLUS
CN 2-Propenoic acid, polymer with ethyl 2-propenoate, 2-hydroxyethyl 2-propenoate, N-(hydroxymethyl)-2-propenamide, 2,2'-[1,3-phenylenebis(oxymethylene)]bis[oxirane], 2-propenamide and 2-propenenitrile (9CI) (CA INDEX NAME)

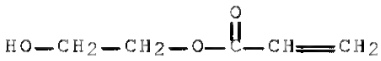
CM 1

CRN 924-42-5
CMF C4 H7 N O2



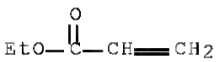
CM 2

CRN 818-61-1
CMF C5 H8 O3



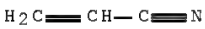
CM 3

CRN 140-88-5
CMF C5 H8 O2



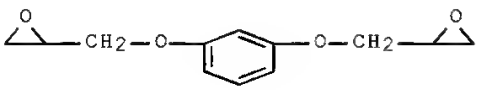
CM 4

CRN 107-13-1
CMF C3 H3 N



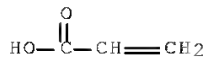
CM 5

CRN 101-90-6
CMF C12 H14 O4



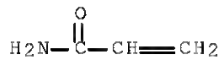
CM 6

CRN 79-10-7
CMF C3 H4 O2



CM 7

CRN 79-06-1
CMF C3 H5 N O



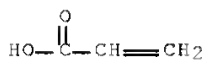
IC ICM C09J003-16
ICA C08G059-40; H05K003-38
CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 76
IT 124767-78-8 124767-79-9 124767-80-2 **124767-81-3**
124767-82-4 124825-62-3 124848-31-3 124949-99-1
(adhesives, solder-resistant, insulating, for flexible circuit boards)

L17 ANSWER 45 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:576216 HCAPLUS Full-text
DOCUMENT NUMBER: 111:176216
TITLE: Radiation-chemical curing of unsaturated epoxy oligomers
AUTHOR(S): Danilyuk, O. A.; Kuznetsova, V. M.; Shiryaeva, G. V.; Urvelis, T. A.; Zadontsev, B. G.; Neroznik, V. G.; Burmenko, A. S.; Arshinnikova, V. I.
CORPORATE SOURCE: KhPI, USSR
SOURCE: Lakokrasochnye Materialy i Ikh Primenenie (**1989**), (1), 44-6
CODEN: LAMAAD; ISSN: 0023-737X
DOCUMENT TYPE: Journal
LANGUAGE: Russian
ED Entered STN: 10 Nov 1989
AB Radiation-curable epoxy coatings which exhibited low curing inhibition by atmospheric O and good adhesion and strength properties were obtained from epoxy resin (meth)acrylates and maleates, optionally containing styrene as a reactive diluent. The properties of the coatings could be regulated by the addition of modifiers, which had no significant influence on the radiochem. curing. The curing occurred at low radiation doses and was not influenced by the type of radiation (electron beam, γ ray). The highest reactivity was observed for a polyepichlorohydrin acrylate. The epoxy coatings had impact strength 45-50 cm, bending strength 1-3 mm, adhesion 1-2 units, and good dielec. properties. They were resistant to water, 3% NaCl, 25% H2SO4, and 10% NaOH.
IT **117925-72-1**, EAS 637
(coatings, radiation curing of)
RN 117925-72-1 HCAPLUS
CN Oxirane, 2,2'-[1,3-phenylenebis(oxymethylene)]bis-, homopolymer,

2-propenoate (CA INDEX NAME)

CM 1

CRN 79-10-7
CMF C3 H4 O2

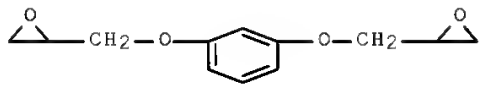


CM 2

CRN 29563-13-1
CMF (C12 H14 O4)x
CCI PMS

CM 3

CRN 101-90-6
CMF C12 H14 O4

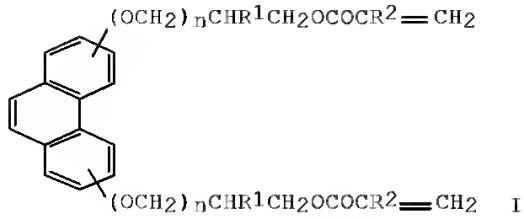


CC 42-3 (Coatings, Inks, and Related Products)
IT 103018-62-8 117924-95-5 **117925-72-1**, EAS 637
123210-77-5, EAS 643MS 123242-34-2
(coatings, radiation curing of)

L17 ANSWER 46 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:515914 HCAPLUS Full-text
DOCUMENT NUMBER: 111:115914
TITLE: Light- and electron beam-curable phenanthrene (meth)acrylates
INVENTOR(S): Sugiura, Michio; Kato, Yuzo
PATENT ASSIGNEE(S): Nippon Steel Chemical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01075447	A	19890322	JP 1987-234140 <--	19870918
PRIORITY APPLN. INFO.:			JP 1987-234140 <--	19870918

ED Entered STN: 01 Oct 1989
GI



I

AB The title (meth)acrylates I (R1 = OH, OCOCR2:CH2; R2 = H, Me; n ≥1) give cured products with good hardness, adhesion, and heat resistance and are useful for coatings, inks, adhesives, etc. Thus, 2,7-bis(1,2-epoxypropoxy)phenanathrene, prepared from phenanthrene in 4 steps, was refluxed with methacrylic acid in benzene in the presence of Et3N to give 80% 2,7-I (R1 = OH, R2 = Me, n = 1), which was treated with methacryloyl chloride in benzene to give 70% 2,7-I (R1 = OCOCMe:CH2, R2 = Me, n = 1) (II). II containing 30% poly(vinylpyrrolidone) and 3% Merck 1173-Irgacure 651 (1/4) mixture was applied on an Al plate and irradiated by UV to form a coating with crosscut adhesion 97/100, vs. 28/100 using Viscoat 540 instead of II.

IT **122563-99-9**
(coatings, with good adhesion)

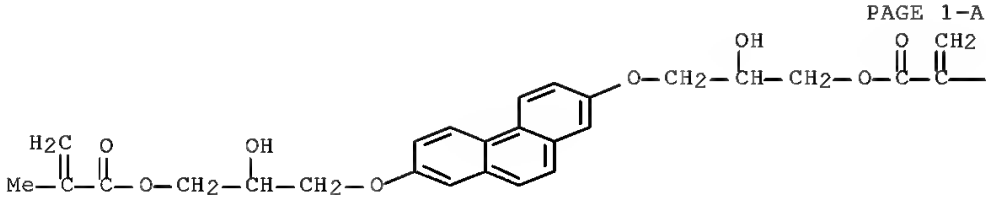
RN 122563-99-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2,7-phenanthrenediylbis[oxy(2-hydroxy-3,1-propanediyl)] ester, polymer with 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM 1

CRN 122563-98-8
CMF C28 H30 O8

PAGE 1-A

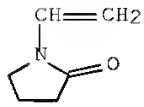


PAGE 1-B

—Me

CM 2

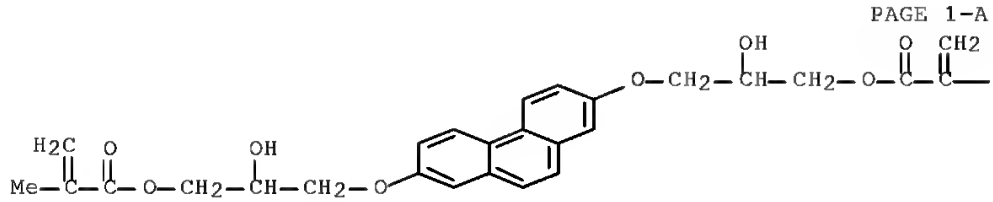
CRN 88-12-0
CMF C6 H9 N O



IT **122563-98-8P 122616-86-8P**
(preparation of, electron beam- and UV-curable, for coatings and inks and adhesives)

RN 122563-98-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2,7-phenanthrenediylbis[oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)

PAGE 1-A

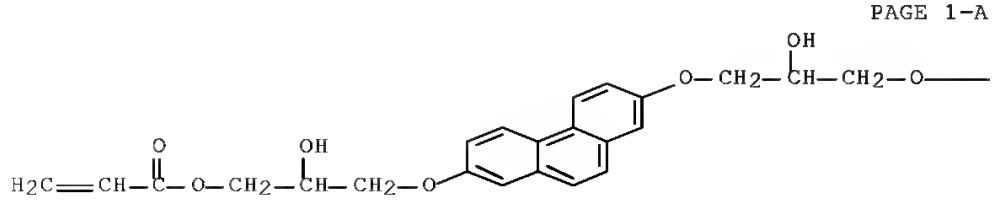


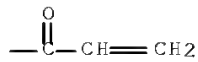
PAGE 1-B

—Me

RN 122616-86-8 HCAPLUS
CN 2-Propenoic acid, 2,7-phenanthrenediylbis[oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)

PAGE 1-A



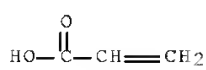


IC ICM C07C069-54
ICS C08F002-48; C08F002-54; C08F020-30; C08F299-02
CC 35-2 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 38, 42
IT **122563-99-9** 122564-01-6
(coatings, with good adhesion)
IT **122563-98-8P** 122564-00-5P **122616-86-8P**
122616-87-9P
(preparation of, electron beam- and UV-curable, for coatings and inks and adhesives)

L17 ANSWER 47 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:135882 HCAPLUS Full-text
DOCUMENT NUMBER: 110:135882
TITLE: Effect of polyfunctional monomers on the photoinitiated crosslinking of polyethylene
AUTHOR(S): Zamotaev, P. V.; Andreev, V. L.; Stel'tsova, Z. O.; Kachan, A. A.; Moev, A. G.
CORPORATE SOURCE: USSR
SOURCE: Plasticheskie Massy (**1988**), (12), 29-31
CODEN: PLMSAI; ISSN: 0554-2901
DOCUMENT TYPE: Journal
LANGUAGE: Russian
ED Entered STN: 15 Apr 1989
AB In using multifunctional allylic and acrylic monomers for acceleration of the photochem. crosslinking of polyethylene in the presence of a photoinitiator, the effectiveness of the multifunctional monomers depended on the nature of both the multifunctional monomer and the photoinitiator. During use of xanthone in combination with triallyl isocyanurate or acrylic monomers, acceleration was substantial, especially at low irradiation times.
IT **117925-72-1**
(crosslinking agents, for photochem. curing of polyethylene, acceleration effect of)
RN 117925-72-1 HCAPLUS
CN Oxirane, 2,2'-[1,3-phenylenebis(oxymethylene)]bis-, homopolymer, 2-propenoate (CA INDEX NAME)

CM 1

CRN 79-10-7
CMF C3 H4 O2

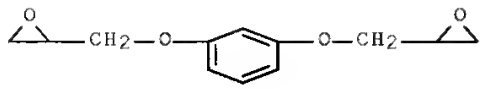


CM 2

CRN 29563-13-1
CMF (C12 H14 O4)x
CCI PMS

CM 3

CRN 101-90-6
CMF C12 H14 O4



CC 35-8 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 37
IT 1025-15-6, Triallyl isocyanurate 1070-70-8 3524-68-3, Pentaerythritol triacrylate 4074-88-8, Diethylene glycol diacrylate **117925-72-1**
(crosslinking agents, for photochem. curing of polyethylene, acceleration effect of)

L17 ANSWER 48 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:9026 HCAPLUS Full-text
DOCUMENT NUMBER: 110:9026
TITLE: Properties of epoxy acrylic compounds and photopolymers from them
AUTHOR(S): Neroznik, V. G.; Podol'naya, L. A.; Mikh, T. F.; Zadontsev, B. G.; Zaitsev, Yu. S.; Burmenko, A. S.; Arshinnikova, V. I.; Kochergin, Yu. S.; Kobzeva, T. I.
CORPORATE SOURCE: USSR
SOURCE: Plasticheskie Massy (**1988**), (9), 20-2
CODEN: PLMSAI; ISSN: 0554-2901
DOCUMENT TYPE: Journal
LANGUAGE: Russian
ED Entered STN: 06 Jan 1989
AB Acrylate-terminated epoxy resins, obtained by esterification of epoxy oligomers ED-20, UP-637, UP-671, DGF-25, UP-650D, UP-655, and DEG-1 with acrylic acid in the presence of UP 606/2 catalyst and hydroquinone inhibitor, were characterized by viscosity (η) at 298-363° and activation energy (Eη) of viscous flow and photohardened in the presence of benzophenone. The photopolymers were characterized by gel fraction, tensile strength, glass temperature, and absorption and diffusion of water. The lowest η and Eη were observed for epoxy resin acrylates based on aliphatic UP-650D, UP-655, and EDG-1. The η and Eη of epoxy acrylates based on aromatic ED-20, UP-637, UP-671, and DGF-25 increased 10-100 fold and 1.5-2 fold, resp., as a result of the introduction of aromatic groups in the oligomeric block due to the intensification of mol. interaction. The polymerization activity of epoxy acrylates increased through the ED-20, UP-637, UP-671, and DGF-25 oligomer series, due to an increase in CO group content. Glassy and highly elastic photopolymers were formed from aromatic and aliphatic oligomers, resp.
IT **118023-89-5**
(phys. and mech. properties of photochem. prepared)

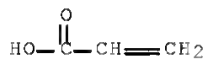
RN 118023-89-5 HCAPLUS
CN Oxirane, 2,2'-[1,3-phenylenebis(oxymethylene)]bis-, homopolymer, 2-propenoate, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 117925-72-1
CMF (C12 H14 O4)x . x C3 H4 O2

CM 2

CRN 79-10-7
CMF C3 H4 O2

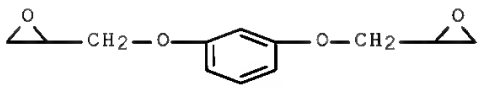


CM 3

CRN 29563-13-1
CMF (C12 H14 O4)x
CCI PMS

CM 4

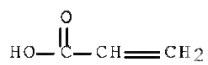
CRN 101-90-6
CMF C12 H14 O4



IT **117925-72-1**, UP 637 acrylate
(physicochem. properties of photopolymerizable)
RN 117925-72-1 HCAPLUS
CN Oxirane, 2,2'-[1,3-phenylenebis(oxymethylene)]bis-, homopolymer, 2-propenoate (CA INDEX NAME)

CM 1

CRN 79-10-7
CMF C3 H4 O2

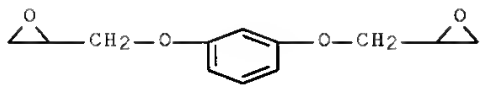


CM 2

CRN 29563-13-1
CMF (C12 H14 O4)x
CCI PMS

CM 3

CRN 101-90-6
CMF C12 H14 O4

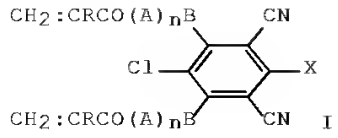


CC 37-5 (Plastics Manufacture and Processing)
IT 94422-71-6 118023-88-4 **118023-89-5** 118023-90-8
118023-92-0 118056-45-4 118056-46-5
(phys. and mech. properties of photochem. prepared)
IT 55818-57-0, ED 20 acrylate 81989-03-9, DEG 1 acrylate 96510-35-9, DGF 25 acrylate 117924-95-5, UP 671 acrylate 117925-71-0, UP 650D acrylate **117925-72-1**, UP 637 acrylate 117926-00-8
(physicochem. properties of photopolymerizable)

L17 ANSWER 49 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1988:438402 HCAPLUS Full-text
DOCUMENT NUMBER: 109:38402
TITLE: Radiation-curable isophthalonitrile derivatives
INVENTOR(S): Ishikawa, Nobuo; Takaoka, Akio; Watanabe, Tomoyuki; Ikehara, Toyoji; Narita, Kichihei; Ito, Haruaki
PATENT ASSIGNEE(S): SDS Biotech K. K., Japan; San Nopco Ltd.
SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62240655	A	19871021	JP 1986-84068 <--	19860414
PRIORITY APPLN. INFO.:			JP 1986-84068 <--	19860414

ED Entered STN: 05 Aug 1988
GI



I

AB Isophthalonitrile derivs. I [R = H, Me; A = OCH2CH2, OCHMeCH2, OCH2CHOHCH2; B = O, S; X = F, CH2:CRCO(A)nB; n = 0-4] polymerizable by radiation are prepared Thus, 4.3 g 5-chloro-2,4,6- trifluoroisophthalonitrile was treated with 7.2 g CH2:CHCO2H in the presence of 5.8 g KF and methylhydroquinone in MeCN at room temperature for 12 h to give 4.5 g I (X = F, R = H, B = O, n = 0) (II) with 95% purity in 68% yield. Then, II was mixed with 4.8% Darocur 1173 and 1.2% Ph2CO, coated on a glass plate, then irradiated with UV to give a cured film showing pencil hardness 2H.

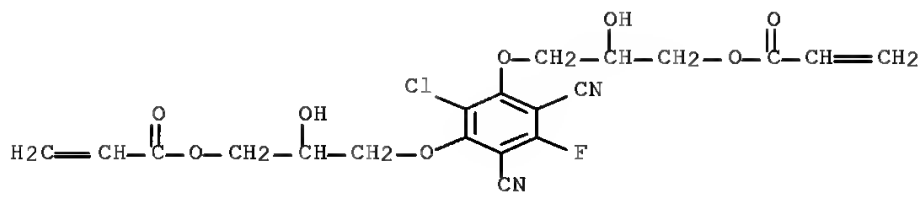
IT **115136-87-3P 115136-93-1P 115137-01-4P**
115156-98-4P
(manufacture of, radiation-cured)

RN 115136-87-3 HCAPLUS

CN 2-Propenoic acid, (2-chloro-4,6-dicyano-5-fluoro-1,3-phenylene)bis[oxy(2-hydroxy-3,1-propanediyl)] ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 115136-86-2
CMF C20 H18 Cl F N2 O8

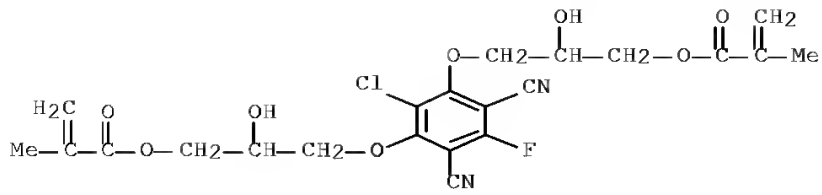


RN 115136-93-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (2-chloro-4,6-dicyano-5-fluoro-1,3-phenylene)bis[oxy(2-hydroxy-2,1-ethanediyl)] ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 115136-92-0
CMF C22 H22 Cl F N2 O8

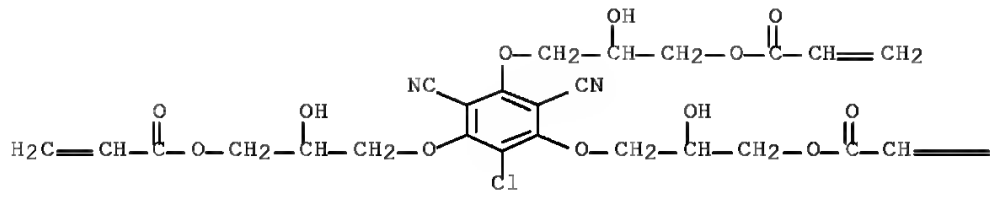


RN 115137-01-4 HCAPLUS
CN 2-Propenoic acid, (2-chloro-4,6-dicyano-1,3,5-benzenetriyl)tris[oxy(2-hydroxy-3,1-propanediyl)] ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 115137-00-3
CMF C26 H27 Cl N2 O12

PAGE 1-A



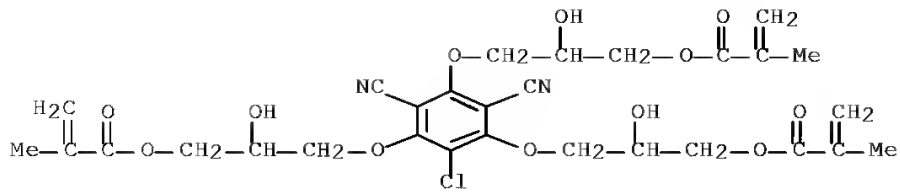
PAGE 1-B

═CH2

RN 115156-98-4 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, (2-chloro-4,6-dicyano-1,3,5-benzenetriyl)tris[oxy(2-hydroxy-3,1-propanediyl)] ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

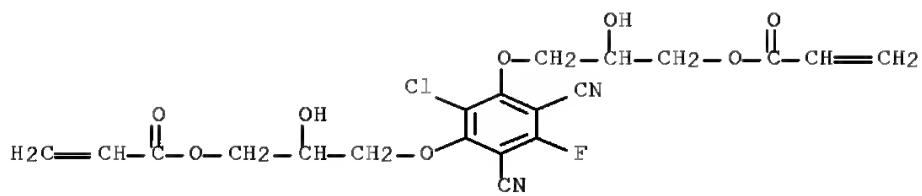
CRN 115156-97-3
CMF C29 H33 Cl N2 O12



IT **115157-05-6P 115157-09-0P 115157-13-6P**
115157-16-9P
(manufacture of, radiation-cured, abrasion- and water-resistant)
RN 115157-05-6 HCAPLUS
CN 2-Propenoic acid, (2-chloro-4,6-dicyano-5-fluoro-1,3-phenylene)bis[oxy(2-hydroxy-3,1-propanediyl)] ester, polymer with Photomer 6008 (9CI) (CA INDEX NAME)

CM 1

CRN 115136-86-2
CMF C20 H18 Cl F N2 O8



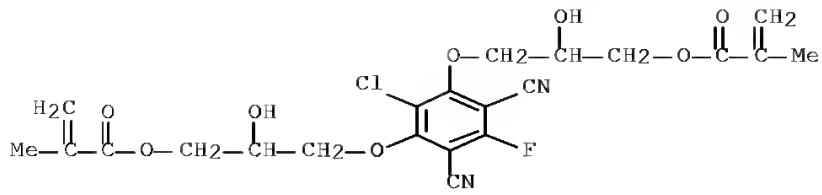
CM 2

CRN 113066-13-0
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 115157-09-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, (2-chloro-4,6-dicyano-5-fluoro-1,3-phenylene)bis[oxy(2-hydroxy-2,1-ethanediyl)] ester, polymer with Photomer 6008 (9CI) (CA INDEX NAME)

CM 1

CRN 115136-92-0
CMF C22 H22 Cl F N2 O8



CM 2

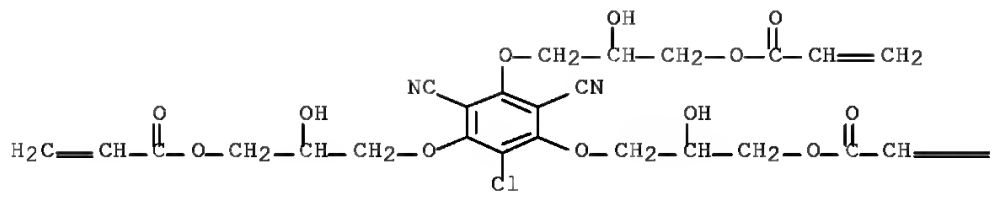
CRN 113066-13-0
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 115157-13-6 HCAPLUS
CN 2-Propenoic acid, (2-chloro-4,6-dicyano-1,3,5-benzenetriyl)tris[oxy(2-hydroxy-3,1-propanediyl)] ester, polymer with Photomer 6008 (9CI) (CA INDEX NAME)

CM 1

CRN 115137-00-3
CMF C26 H27 Cl N2 O12

PAGE 1-A



PAGE 1-B

═CH2

CM 2

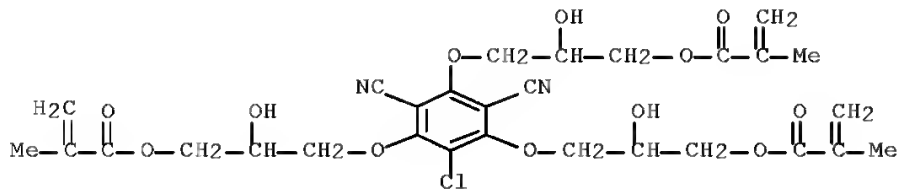
CRN 113066-13-0

CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 115157-16-9 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, (2-chloro-4,6-dicyano-1,3,5-benzenetriyl)tris[oxy(2-hydroxy-3,1-propanediyl)] ester, polymer with Photomer 6008 (9CI) (CA INDEX NAME)

CM 1

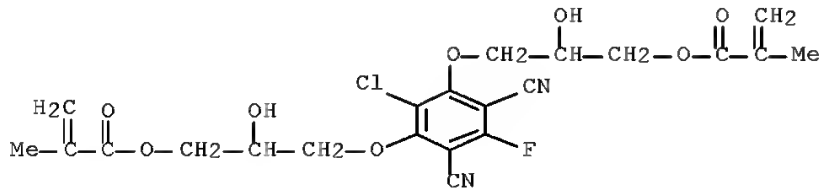
CRN 115156-97-3
CMF C29 H33 Cl N2 O12



CM 2

CRN 113066-13-0
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **115136-92-0P**
(preparation of, radiation-curable without solvents)
RN 115136-92-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, (2-chloro-4,6-dicyano-5-fluoro-1,3-phenylene)bis[oxy(2-hydroxy-2,1-ethanediyl)] ester (9CI) (CA INDEX NAME)



IC ICM C07C121-75
ICS C07C149-415
ICA C08F002-48; C08F020-34; C08F020-38
CC 35-2 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 25, 37
IT 115136-81-7P 115136-83-9P 115136-85-1P **115136-87-3P**

115136-89-5P 115136-91-9P **115136-93-1P** 115136-95-3P
115136-97-5P 115136-99-7P **115137-01-4P** 115137-03-6P
115137-05-8P 115137-07-0P 115137-18-3P 115137-20-7P
115137-22-9P 115137-24-1P 115156-96-2P **115156-98-4P**
115157-00-1P 115157-02-3P
(manufacture of, radiation-cured)

IT 115137-25-2P 115137-26-3P 115137-27-4P 115137-28-5P
115157-03-4P 115157-04-5P **115157-05-6P** 115157-06-7P
115157-07-8P 115157-08-9P **115157-09-0P** 115157-10-3P
115157-11-4P 115157-12-5P **115157-13-6P** 115157-14-7P
115157-15-8P **115157-16-9P** 115157-17-0P 115157-18-1P
115172-08-2P
(manufacture of, radiation-cured, abrasion- and water-resistant)

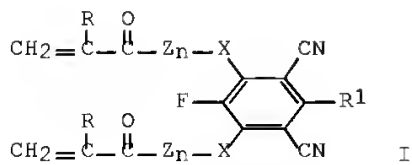
IT 115136-80-6P 115136-82-8P 115136-88-4P 115136-90-8P
115136-92-0P 115136-96-4P 115137-04-7P 115156-95-1P
115157-01-2P 115280-66-5P
(preparation of, radiation-curable without solvents)

L17 ANSWER 50 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1988:114315 HCAPLUS Full-text
DOCUMENT NUMBER: 108:114315
TITLE: Radiation-crosslinkable fluorine-containing aromatic dinitrile compounds
INVENTOR(S): Ishikawa, Nobuo; Takaoka, Akio; Watanabe, Tomoyuki; Ikehara, Toyoji; Narita, Kichihei
PATENT ASSIGNEE(S): SDS Biotech Corp., Japan; San Nopco Ltd.
SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62167751	A	19870724	JP 1986-8923 <--	19860121
JP 06000736	B	19940105		

PRIORITY APPLN. INFO.: JP 1986-8923 <-- 19860121

ED Entered STN: 01 Apr 1988
GI



I

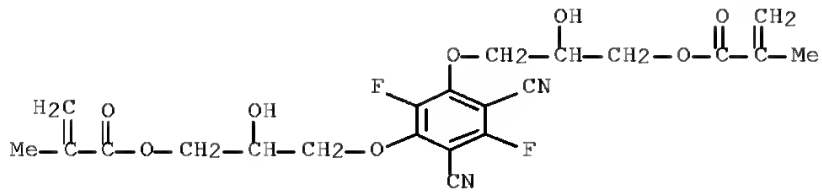
AB Title compds., useful in solvent-free coatings, inks, and adhesives with good water and abrasion-resistance, comprise I (R = H, Me; Z = OCH2CH2, OCHMeCH2,

OCH2CHOHCH2; X = O, S; R = F, CH2:(RCOZX; n = 0-4). Tetrafluoroisophthalonitrile 4.0, acrylic acid 7.2, KF 5.8, and methylhydroquinone 0.008 g were mixed in MeCN at room temperature for 12 h to give 4.14 g 2,5-difluoro-4,6-bis(acryloyloxy)isophthalonitrile (II). II 100, 2-hydroxy-2-methyl-1-phenylpropan-1-one 4.8 and benzophenone 1.2%, were coated onto glass plate, and irradiated with UV-light to give a coating with pencil hardness 2H whereas coating from triethylene glycol diacrylate needed twice the irradiation time. for the same hardness.

IT **112756-35-1 112756-39-5 112756-41-9 112756-44-2**
(coatings containing, UV-curable, solvent-free)

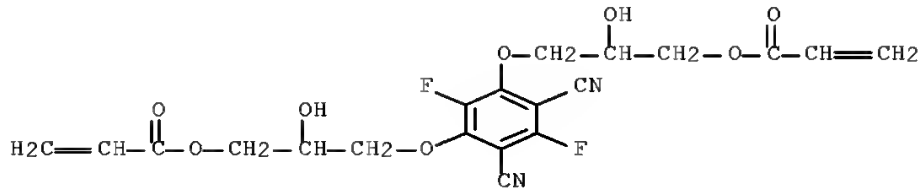
RN 112756-35-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (4,6-dicyano-2,5-difluoro-1,3-phenylene)bis[oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)



RN 112756-39-5 HCAPLUS

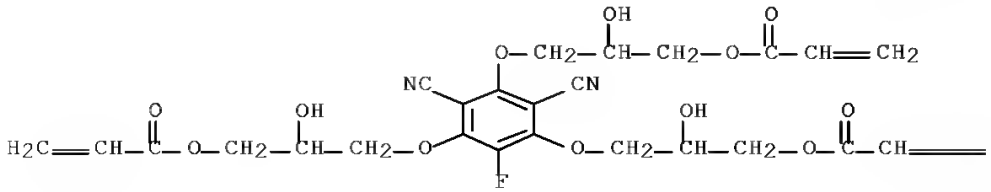
CN 2-Propenoic acid, (4,6-dicyano-2,5-difluoro-1,3-phenylene)bis[oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)



RN 112756-41-9 HCAPLUS

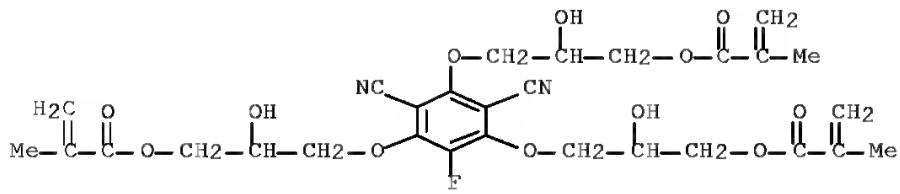
CN 2-Propenoic acid, (2,4-dicyano-6-fluoro-1,3,5-benzenetriyl)tris[oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)

PAGE 1-A



=CH2

RN 112756-44-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, (2,4-dicyano-6-fluoro-1,3,5-benzenetriyl)tris[oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)



IC ICM C07C121-75
ICS C07C149-415; C07C153-11
ICA C08F020-34; C08F020-36
CC 42-10 (Coatings, Inks, and Related Products)
Section cross-reference(s): 37
IT 112755-38-1 112755-39-2 112755-40-5 112755-41-6
112756-35-1 112756-36-2 112756-37-3 112756-38-4
112756-39-5 112756-40-8 **112756-41-9** 112756-42-0
112756-43-1 **112756-44-2** 112756-45-3 112756-47-5
112756-63-5 112756-64-6 112759-63-4 112759-64-5 112759-65-6
112759-66-7
(coatings containing, UV-curable, solvent-free)

L17 ANSWER 51 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1981:604884 HCAPLUS Full-text
DOCUMENT NUMBER: 95:204884
TITLE: Compositions containing acrylate and their polymerization
INVENTOR(S): Irving, Edward; Green, George Edward
PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.
SOURCE: Eur. Pat. Appl., 58 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 31305	A2	19810701	EP 1980-810397 <--	19801217
EP 31305	A3	19810722		
EP 31305	B1	19851002		
R: BE, DE, FR, GB, IT, NL, SE				
CA 1190699	A1	19850716	CA 1980-367167 <--	19801219
ES 498029	A1	19811116	ES 1980-498029 <--	19801220
US 4439291	A	19840327	US 1982-400784 <--	19820722
PRIORITY APPLN. INFO.:			GB 1979-44319 A <--	19791222
			GB 1980-13262 A <--	19800422
			US 1980-214920 A1 <--	19801210

ED Entered STN: 12 May 1984

AB Compns. containing (meth)acrylates bearing (meth)allyl or 1-propenyl groups and polythiols are polymerized readily by radiation or radical catalysts to coatings or adhesives with good resistance to weathering. Thus, 3,3'-diallylbisphenol A bis[2-hydroxy-3-(methacryloyloxy)propyl] ether [79495-75-3] 78, pentaerythritol tetrakis(thioglycolate) 30, and PhCOC(OMe)2Ph 3 parts were coated to 10 μ on tin plate and exposed to an 80-W/cm UV lamp for 2 s to give a cured, solvent-resistant polymer [79519-20-3] film.

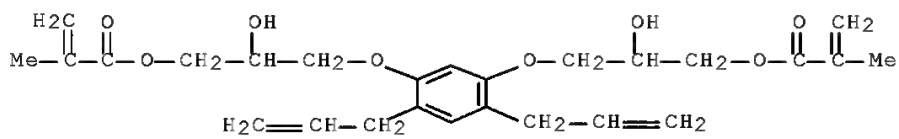
IT **79519-26-9P**
(manufacture of, by radical and photochem. polymerization)

RN 79519-26-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (2,4-di-2-propenyl-1,3-phenylene)bis[oxy(2-hydroxy-3,1-propanediyl)] ester, polymer with 2,2-bis[[(mercaptoacetyl)oxy]methyl]-1,3-propanediyl bis(mercaptoacetate) and (4,6-di-2-propenyl-1,3-phenylene)bis[oxy(2-hydroxy-3,1-propanediyl)] bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

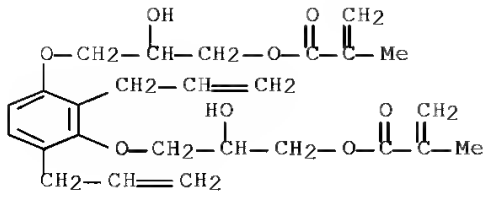
CM 1

CRN 79495-83-3
CMF C26 H34 O8



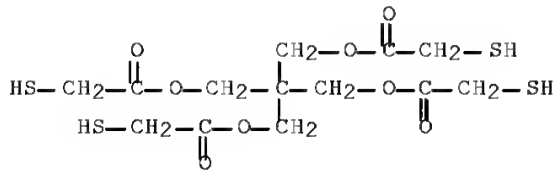
CM 2

CRN 79495-82-2
CMF C26 H34 O8

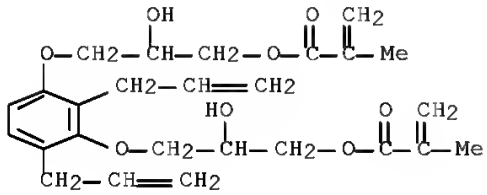


CM 3

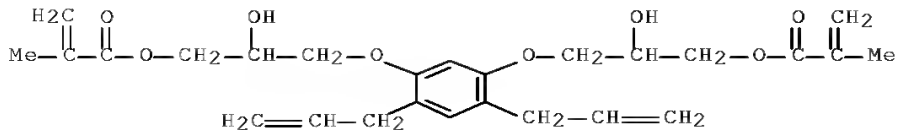
CRN 10193-99-4
CMF C13 H20 O8 S4



IT **79495-82-2P 79495-83-3P**
(preparation of)
RN 79495-82-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, (2,4-di-2-propenyl-1,3-phenylene)bis[oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)

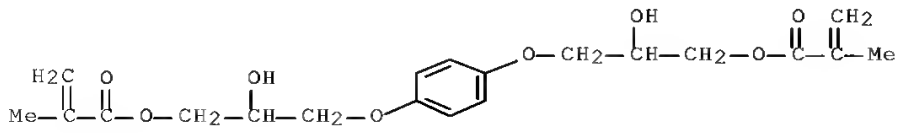


RN 79495-83-3 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, (4,6-di-2-propenyl-1,3-phenylene)bis[oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)



IC C08F020-40; C08F002-48; C09J003-14
CC 36-3 (Plastics Manufacture and Processing)
Section cross-reference(s): 25
IT 79519-20-3P 79519-21-4P 79519-22-5P 79519-23-6P 79519-24-7P
79519-25-8P **79519-26-9P** 79519-27-0P 79548-89-3P
79548-90-6P 79616-80-1P
(manufacture of, by radical and photochem. polymerization)
IT 79495-75-3P 79495-77-5P 79495-78-6P 79495-79-7P 79495-80-0P
79495-81-1P **79495-82-2P 79495-83-3P** 79497-14-6P
(preparation of)

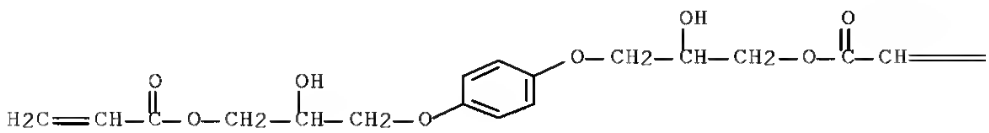
L17 ANSWER 52 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1979:187689 HCAPLUS Full-text
DOCUMENT NUMBER: 90:187689
ORIGINAL REFERENCE NO.: 90:29841a
TITLE: Reaction of some diepoxides with acrylic acids
AUTHOR(S): Morozova, T. V.; Selyakova, V. A.; Sineokov, A. P.
CORPORATE SOURCE: USSR
SOURCE: Osnovnoi Organicheskii Sintez i Neftekhimiya (**1977**), 8, 45-9
CODEN: OOSNDC; ISSN: 0321-2386
DOCUMENT TYPE: Journal
LANGUAGE: Russian
ED Entered STN: 12 May 1984
AB The reaction of ED-20 (I) [25068-38-6] with methacrylic acid (II) [79-41-4] (1:2.1 I-II ratio) in the presence of basic Cr chloride methacrylate catalyst at 60-120° was 1st order with respect to epoxide and catalyst and zero order with respect to acid, indicating the formation of an acid-catalyst complex, with its subsequent slow reaction with the epoxide. The reaction of another epoxide, hydroquinone diglycidyl ether [2425-01-6], with (meth)acrylic acid gave crystalline 1,4-bis[3-(meth)acryloyloxy-2-hydroxypropyl]benzene (III). Attempts to obtain III from glycidyl dimethacrylate (IV) and hydroquinone led to the formation of IV polymer [25067-05-4] via epoxide ring opening.
IT **70066-72-7P 70157-37-8P**
(preparation of)
RN 70066-72-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 1,1'-[1,4-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)]] ester (CA INDEX NAME)



RN 70157-37-8 HCAPLUS

CN 2-Propenoic acid, 1,4-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

=CH2

CC 36-4 (Plastics Manufacture and Processing)
IT 25067-05-4P **70066-72-7P 70157-37-8P**
(preparation of)

L17 ANSWER 53 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1977:473390 HCAPLUS Full-text
DOCUMENT NUMBER: 87:73390
ORIGINAL REFERENCE NO.: 87:11639a,11642a
TITLE: Cement composition useful as dental filling material
INVENTOR(S): Gander, Robert Johns; Potts, Richard McCrea
PATENT ASSIGNEE(S): Johnson and Johnson, USA
SOURCE: Fr. Demande, 33 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2276808	A1	19760130	FR 1974-23366 <--	19740704
FR 2276808	B1	19781229		
CH 617346	A5	19800530	CH 1974-9295 <--	19740705
PRIORITY APPLN. INFO.:			FR 1974-23366 A <--	19740704

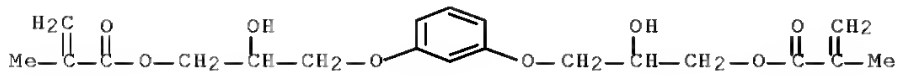
ED Entered STN: 12 May 1984
AB Dental cement compns. comprise primarily mineral particles, a binder, a peroxide-based catalyst for polymerizing the binder, and a free radical generator. The binder consists of a monomer from the group of substituted trimethacrylates of glycerol and 1 from (CH2:CR2CO2CH2)3CR1, where R1 = Me, Et, or Pr and R2 = H or Me. For example, 2 pastes were prepared, one containing trimethylolpropane trimethacrylate (I) [3290-92-4] 11, CMPDO-25 MA [63496-14-0] 7.0, N,N-bis(2-hydroxyethyl)-p-toluidine 0.02, silane-treated quartz crystals 82.0 weight %, and the other paste contained I 11.0, CMPDO-25

MA 7.0, benzoyl peroxide 0.02, and silane-treated quartz crystals 82.0 weight %. Equal parts of both pastes were mixed for 30 sec and placed in molds. The material had a compression resistance of 3414 kg/cm2, tensil strength of 491 kg/cm2, Flexion coefficient of 18 + 104 kg/cm2, and a Rockwell hardness of 103.

IT **53773-68-5 63463-92-3 63463-98-9**
(dental cements containing)

RN 53773-68-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)

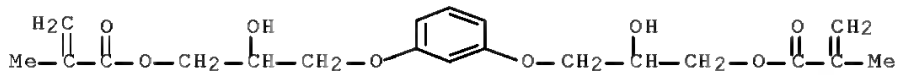


RN 63463-92-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-ethyl-2-[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

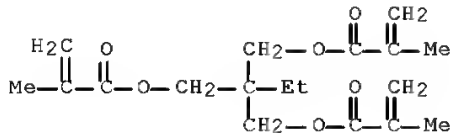
CM 1

CRN 53773-68-5
CMF C20 H26 O8



CM 2

CRN 3290-92-4
CMF C18 H26 O6

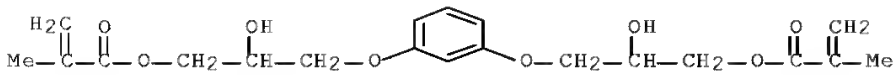


RN 63463-98-9 HCAPLUS

CN 2-Propenoic acid, 2-ethyl-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

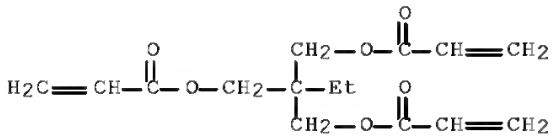
CM 1

CRN 53773-68-5
CMF C20 H26 O8



CM 2

CRN 15625-89-5
CMF C15 H20 O6



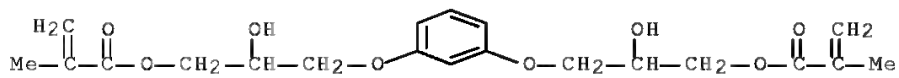
IC A61K005-02
CC 63-7 (Pharmaceuticals)
IT 3290-92-4 26426-04-0 36446-02-3 53773-67-4 **53773-68-5**
63463-91-2 **63463-92-3** 63463-93-4 63463-96-7 63463-97-8
63463-98-9 63496-14-0 63496-29-7 63550-87-8 63559-71-7
63727-25-3
(dental cements containing)

L17 ANSWER 54 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1977:30496 HCAPLUS Full-text
DOCUMENT NUMBER: 86:30496
ORIGINAL REFERENCE NO.: 86:4889a,4892a
TITLE: Photosensitine resin compositions
INVENTOR(S): Sano, Takezo; Inoue, Tadanori; Uemura, Yukikazu; Furuta, Akihiro
PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 51107820	A	19760924	JP 1975-33941 <--	19750319
JP 59002017	B	19840117		

PRIORITY APPLN. INFO.: JP 1975-33941 A 19750319
<--

ED Entered STN: 12 May 1984
AB Photosensitive resin compns. with good heat and pressure resistances were prepared from an unsatd. polyester (acid value 10-40, ≥50 mol% of acid component unsatd.), β-hydroxyethyl methacrylate, an epoxy (meth)acrylate resin containing aromatic groups (mol. weight ≤800), a photopolymn. initiator, and a thermal polymerization inhibitor in specified proportions. Thus, 70 parts of an unsatd. polyester [58317-03-6] (acid value 22) obtained by polymerizing 1:2:3 mole ratio isophthalic acid-maleic anhydride-triethylene glycol was mixed with 2-hydroxyethyl methacrylate [868-77-9] 25, bisphenol A diglycidyl ether dimethacrylate [1565-94-2] 5, benzoin isopropyl ether 1, and hydroquinone 0.1 part to give a photosensitive resin composition, which was useful for manufacture of printing plates.
IT **53773-68-5**
(photopolymerizable compns. containing, for printing plates)
RN 53773-68-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)

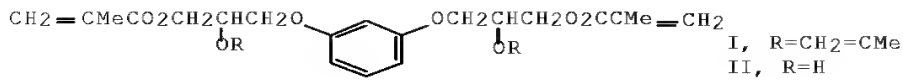


IC G03C001-71
CC 36-3 (Plastics Manufacture and Processing)
Section cross-reference(s): 74
IT 868-77-9 1565-94-2 26913-44-0 26951-10-0 **53773-68-5**
58317-03-6
(photopolymerizable compns. containing, for printing plates)

L17 ANSWER 55 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1976:549159 HCAPLUS Full-text
DOCUMENT NUMBER: 85:149159
ORIGINAL REFERENCE NO.: 85:23855a,23858a
TITLE: Monomeric methacrylate composition for use as dental cement
INVENTOR(S): Gander, Robert J.
PATENT ASSIGNEE(S): Johnson and Johnson, USA
SOURCE: Braz. Pedido PI, 24 pp.
CODEN: BPXXDX
DOCUMENT TYPE: Patent
LANGUAGE: Portuguese
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BR 7406844	A	19760406	BR 1974-6844 <--	19740819
US 3853962	A	19741210	US 1973-410731 <--	19731029
PRIORITY APPLN. INFO.:			US 1972-223369 A <--	19720203

ED Entered STN: 12 May 1984
GI



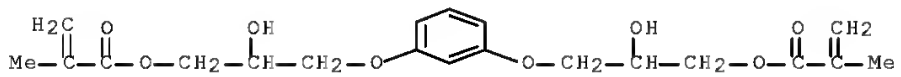
I, R=CH2=CMe
II, R=H

AB A methacrylate monomer, 1,3-bis[2,3-di(methacryloxy)propoxy]benzene (I) [53773-67-4] was used as the binder in dental restorative compns. which contained 70-90% silane-particles (<200 mesh) treated quartz [14808-60-7]. Following polymerization and fixation, the compound was H2O-insol. with a high compression strength. The low viscosity of the binding monomer made it suitable for use in dental restorative materials without the use of dilutants to lower the viscosity. The monomer was prepared by refluxing resorcinol diglycidyl ether [101-90-6], methacrylic acid [79-41-4], Ph3P, and p-methoxyphenol for 48 hr to give 13-bis(2-hydroxy-3-methacryloxypropoxy)benzene (II) [**53773-68-5**]. II was treated with CH2:CMeCOCl to give I. In practice 2 pastes were prepared, one containing the accelerator, and the other containing the catalyst: 1) silane-treated quartz 80; I 20; and N,N-bis(2-hydroxyethyl)-p-toluidine (accelerator) 0.2 and 2) silane-treated quartz 80; I 20; and Bz2O2 (catalyst) 0.2% (by weight). The 2 parts were mixed immediately prior to use.

IT **53773-68-5P**
(preparation and reaction with methacryloyl chloride)

RN 53773-68-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)



IC C07C069-54

CC 63-7 (Pharmaceuticals)
Section cross-reference(s): 25

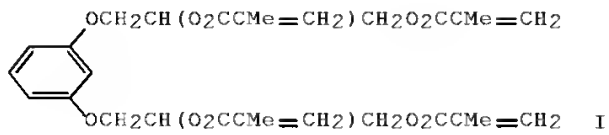
IT **53773-68-5P**
(preparation and reaction with methacryloyl chloride)

L17 ANSWER 56 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1976:530386 HCAPLUS Full-text
DOCUMENT NUMBER: 85:130386
ORIGINAL REFERENCE NO.: 85:20866h,20867a
TITLE: Methacrylate monomer and cement prepared from it for the direct filling of teeth
PATENT ASSIGNEE(S): Johnson and Johnson, USA
SOURCE: Neth. Appl., 16 pp.
CODEN: NAXXAN
DOCUMENT TYPE: Patent
LANGUAGE: Dutch
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

NL 7411068 A 19760223 NL 1974-11068 19740819
<--
PRIORITY APPLN. INFO.: NL 1974-11068 A 19740819
<--

ED Entered STN: 12 May 1984
GI



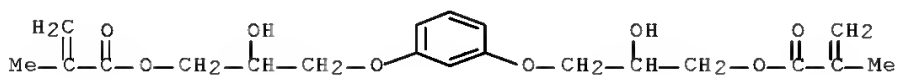
I

AB The methacrylate monomer 1,3-bis[2,3-bis(methacryloxy)propoxy]benzene (I) [53773-67-4] is a binder for dental fillings which has appropriate viscosity without dilution and which confers a high degree of hardness on the fillings. For example, 500 g quartz particles (average diameter 20μ) was coated with 10 g γ-methacryloxypropyltrimethoxysilan e and dried. A paste was prepared containing I 6.40, N,N-bis(2- hydroxyethyl)-p-toluidine 0.1, and silane-treated quartz 26.00 parts by weight, and another tape containing I 6.30, benzoyl peroxide 0.20, and silane-treated quartz 26.00 parts. Equal parts of the 2 pastes were mixed and the mass hardened after minutes. After 24 hours the mass had a compression strength of 2911.1 kg/cm2 and a tensile strength 504.4 kg/cm2. To prepare I, 600 g resorcinol diglycidyl ether [101-90-6] was reacted with 430 g methacrylic acid [79-41-4], 5.0 g Ph3P, and 0.5 g p-methoxyphenol at 80-5° for 48 hours, and the resulting 1,3-bis(2-hydroxy-3-methacryloxypropoxy)benzene [**53773-68-5**] was reacted with methacrylyl chloride [920-46-7].

IT **53773-68-5P**
(preparation and reaction of, with methacrylyl chloride)

RN 53773-68-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)



IC C07C069-54

CC 62-7 (Essential Oils and Cosmetics)
Section cross-reference(s): 25, 37

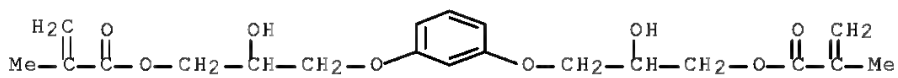
IT **53773-68-5P**
(preparation and reaction of, with methacrylyl chloride)

L17 ANSWER 57 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1975:103182 HCAPLUS Full-text
DOCUMENT NUMBER: 82:103182
ORIGINAL REFERENCE NO.: 82:16441a,16444a
TITLE: Cement compositions employing methacrylate monomer
INVENTOR(S): Gander, Robert J.

PATENT ASSIGNEE(S): Johnson and Johnson
SOURCE: U.S., 4 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3845009	A	19741029	US 1973-410732 <--	19731029
US 3853962	A	19741210	US 1973-410731 <--	19731029
PRIORITY APPLN. INFO.:			US 1972-223369 <--	A2 19720203

ED Entered STN: 12 May 1984
AB The compounding of 1,3-bis[2,3-bis(methacryloyloxy)propoxy]benzene (I) [53773-67-4] with Bz2O2 and silane derivative-treated SiO2 [7631-86-9] gave composite dental restoratives with improved compressive strength. Thus, a paste containing I 12.70, [3-(methacryloyloxy)propyl]trimethoxysil ane [2530-85-0]-treated quartz [14808-60-7] 52, N,N-bis(2- hydroxyethyl)-p-toluidine 0.10, and Bz2O2 0.20 part was hardened for 24 hr at 100° F to give a specimen with 41,406 ± 1,384 psi compressive and 7,174 ± 243 psi tensile strength.
IT **53773-68-5**
(esterification of, with methacryloyl chloride)
RN 53773-68-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)



IC C08F; C08G; C09K
INCL 260042150
CC 63-7 (Pharmaceuticals)
Section cross-reference(s): 36
IT **53773-68-5**
(esterification of, with methacryloyl chloride)

L17 ANSWER 58 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1975:21831 HCAPLUS Full-text
DOCUMENT NUMBER: 82:21831
ORIGINAL REFERENCE NO.: 82:3445a,3448a
TITLE: Dental restorative cement compositions
INVENTOR(S): Gander, Robert J.; Potts, Richard M.
PATENT ASSIGNEE(S): Johnson and Johnson
SOURCE: U.S., 9 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

US 3835090	A	19740910	US 1972-223284 <--	19720203
PRIORITY APPLN. INFO.:			US 1972-223284 <--	A 19720203

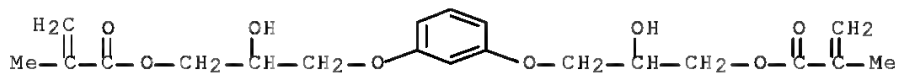
ED Entered STN: 12 May 1984

AB The cement composition, useful as a dental restorative, consists of a major portion of an inorg. filler material of average particle size of 15-30 μ, a binder [(CH2:CRCO2CH2)2CHO2CCR:CH2] for mixing with the filler material, a peroxide catalyst for polymerizing the binder, and an activator for producing free radicals upon reaction with the peroxide catalyst. The filler material may be silane-treated crystalline quartz. Thus, restoratives containing trimethylolpropane trimethacrylate (TMPTMA) [3290-92-4] with 81.5% quartz filler and 1.3% colloidal Si are prepared Two pastes are prepared, A containing TMPTMA 16.9, N,N-bis(2-hydroxyethyl)-p- toluidine 0.2, silane-treated crystal quartz 81.6, and silane-treated colloidal Si 1.3 wt%.; B containing TMPTMA 16.9, Bz2O2 0.3, silane-treated crystal quartz 81.5, and silane-treated colloidal Si 1.3 weight%. Equal parts of A and B are mixed for 30 sec and then packed into cylindrical split steel molds. After 3 min hardening occurs and the molds are immersed in water at 100°F for 24 hr. The composite cylinders which contain 81.5% quartz filler are expelled from the steel molds, accurately measured, and tested. Compressive strength is 47,680 psi and tensile strength is 6985 psi. Flexural modulus is 2,493,000 psi and Rockwell 30T Hardness is 70.

IT **53773-68-5**
(dental cement containing)

RN 53773-68-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)



IC A61K; C08G

INCL 260042150

CC 63-7 (Pharmaceuticals)

IT 77-99-6D, 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)-, acetate-methacrylate esters 1565-94-2 3290-92-4 7401-88-9 15625-89-5 17407-08-8 24448-20-2 53773-67-4 **53773-68-5** 53807-90-2
(dental cement containing)

L17 ANSWER 59 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:	1974:63871 HCAPLUS Full-text
DOCUMENT NUMBER:	80:63871
ORIGINAL REFERENCE NO.:	80:10321a,10324a
TITLE:	Thermosetting acrylic resins for use as binders in dental filling compositions
INVENTOR(S):	Stoffey, Donald G.; Lee, Henry L., Jr.
SOURCE:	U.S., 4 pp. Division of U.S. 3,721,644 (CA 79;45847d). CODEN: USXXAM
DOCUMENT TYPE:	Patent
LANGUAGE:	English

FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

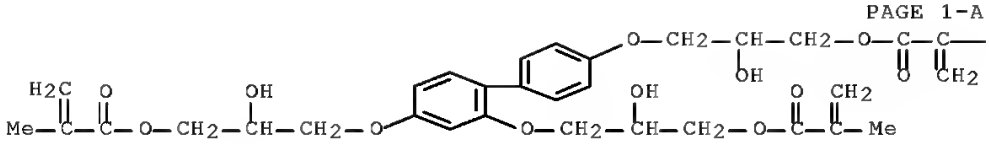
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3774305	A	19731127	US 1972-272061 <--	19720714
US 3721644	A	19730320	US 1970-102044 <--	19701228
PRIORITY APPLN. INFO.:			US 1970-102044 <--	A3 19701228

ED Entered STN: 12 May 1984
AB Tooth cavities are filled initially with a liquid, settable filling material, comprising a finely divided filler and a binder admixed therewith, and thereafter permitting the material to harden in situ, utilizing as a predominant component of the binder, a thermosetting resin compound E.g., 110 ml freshly distilled methacryloyl chloride is added dropwise to a solution of 260 g bisphenol-A bis(3-methacryloyloxy-2- hydroxypropyl) ether(I), 440 ml dry methylene chloride and 170 ml Et3N. During the addition, the reaction mixture is kept at 10°-15°. Following completion of the addition the temperature of the solution is allowed to warm to room temperature during continuous stirring and maintained at that temperature for approx. 30 min. After workup the residue obtained is a colorless liquid of significantly less viscosity than I.
IT **51390-67-1**
(dental filling)
RN 51390-67-1 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, [[1,1'-biphenyl]-2,4,4'-triyltris[oxy(2-hydroxy-3,1-propanediyl)]]ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 49848-07-9
CMF C33 H40 O12

PAGE 1-A



PAGE 1-B

—Me

IC A61K
INCL 032015000
CC 63-7 (Pharmaceuticals)
IT 32238-11-2 **51390-67-1**
(dental filling)

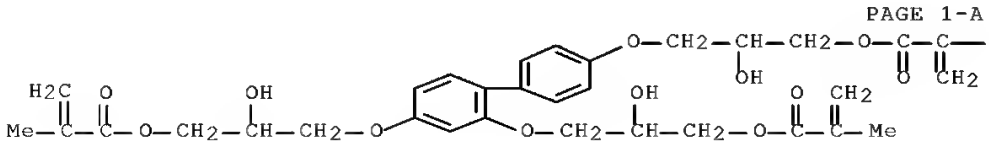
L17 ANSWER 60 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1973:529113 HCAPLUS Full-text

DOCUMENT NUMBER: 79:129113
ORIGINAL REFERENCE NO.: 79:20943a,20946a
TITLE: Triglycidyl ether of trihydroxybisphenyl ester of acrylic acid
INVENTOR(S): Stoffey, Donald G.; Lee, Henry L., Jr.
PATENT ASSIGNEE(S): Lee Pharmaceuticals
SOURCE: U.S., 3 pp. Division of U. S. 3,721,644 (CA 79; 45847d).
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3755420	A	19730828	US 1972-271763 <--	19720714
US 3721644	A	19730320	US 1970-102044 <--	19701228

PRIORITY APPLN. INFO.: US 1970-102044 A3 19701228 <--

ED Entered STN: 12 May 1984
GI For diagram(s), see printed CA Issue.
AB The title compound (I), where R is H, lower alkyl, or halogen, is a thermosetting resin useful in dental restorative compns. Thus, 110 ml of freshly distilled methacryl chloride is added dropwise to a solution of 260 g of bisphenol A bis(3-methacrylate-2-hydroxypropyl) ether, 440 ml of dry CH2Cl2, and 170 ml of (C2H5)3N. During the addition the reaction mixture is kept at 10-15°. After completion of the addition the temperature is allowed to warm to room temperature during continuous stirring and maintained at that temperature for 30 min. Thereafter the amine salt formed is filtered off and the remaining cake is washed with CH2Cl2. The combined organic layer is washed with 0.1N HCl until acidic and then with H2O until neutral; it is dried over anhydrous Na2SO4 and the solvent is removed. The product is a colorless liquid having less viscosity and less H2O absorbing tendencies than BIS-GMA (a glycidyl methacrylate derivative of bisphenol A, referred to as bisphenol A bis(3-methacrylato-2- hydroxypropyl) ether. The colorless liquid product obtained above can be formulated into dental restorative filler compns. without the use of any viscosity reducing diluents.
IT **49848-07-9**
(dental filling)
RN 49848-07-9 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, [1,1'-biphenyl]-2,4,4'-triyltris[oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)



—Me

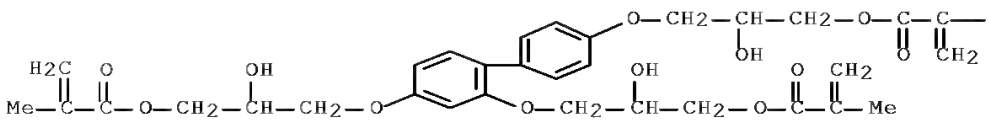
IC C07C
INCL 260486000R
CC 63-7 (Pharmaceuticals)
IT 30779-00-1 **49848-07-9**
(dental filling)

L17 ANSWER 61 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1973:445847 HCAPLUS Full-text
DOCUMENT NUMBER: 79:45847
ORIGINAL REFERENCE NO.: 79:7409a,7412a
TITLE: Thermosetting acrylic resins as binders in dental filling compositions
INVENTOR(S): Stoffey, Donald G.; Lee, Henry L., Jr.
PATENT ASSIGNEE(S): Lee Pharmaceuticals
SOURCE: U.S., 3 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3721644	A	19730320	US 1970-102044 <--	19701228
US 3755420	A	19730828	US 1972-271763 <--	19720714
US 3774305	A	19731127	US 1972-272061 <--	19720714
PRIORITY APPLN. INFO.:			US 1970-102044 <--	A3 19701228

ED Entered STN: 12 May 1984
GI For diagram(s), see printed CA Issue.
AB Dental restorative compns. having improved handling characteristics may be made using 65 to 75% inorg. filler, 25 to 35% thermosetting binder comprised predominantly of I or II where R and R1 may independently be H, C1-4 alkyl or Cl, 0.5 to 1% activator and 1 to 2% catalyst for the binder. The solid fillings formed from such compns. have high compressive strengths well within American Dental Association specification. Number 9. Thus CH2:CMeCOCl is added to bisphenol A bis(3-methacryoyloxy- 2-hydroxypropyl) ether in CH2Cl2 with Et3N to give [I (R = R1 = Me)].
IT **49848-07-9**
(dental filling)
RN 49848-07-9 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, [1,1'-biphenyl]-2,4,4'-triyltris[oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

—Me

IC C08F
INCL 260041000A
CC 63-7 (Pharmaceuticals)
Section cross-reference(s): 25
IT 30779-00-1 **49848-07-9**
(dental filling)

L17 ANSWER 62 OF 62 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1969:482060 HCAPLUS Full-text
DOCUMENT NUMBER: 71:82060
ORIGINAL REFERENCE NO.: 71:15265a,15268a
TITLE: Epoxy adhesive containing acrylic acid-epoxy reaction products and photosensitizers
INVENTOR(S): Steinberg, Israel V.
PATENT ASSIGNEE(S): Bausch and Lomb Inc.
SOURCE: U.S., 4 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3450613	A	19690617	US 1964-350536 <--	19640309
PRIORITY APPLN. INFO.:			US 1964-350536 A <--	19640309

ED Entered STN: 12 May 1984
AB Photopolymerizable epoxy cements are prepared by combining the reaction product of an epoxy resin prepolymer containing at least 2 epoxy groups and an α,β-ethylenically unsatd. carboxylic acid with 0.008-1% photosensitizer. Thus, 4.2 g. Epoxide 206 (vinylcyclohexene diepoxide) was combined with 2.16 g. glacial acrylic acid (I). After 24 hrs. at 25-6°, 0.5% benzoin was added. When a 0.125 in. thick sample of this mixture was exposed to a 275-w. sunlamp at a distance of 6 in., after 15 sec. the fluid cement became a soft, colorless gel, and after 30 sec., a firm, colorless gel was produced that was sufficiently strong for holding cemented optical parts together during normal handling operations. Any relative movement of optical elements bonded together in this manner was imperceptible even under high magnification. Complete cure was effected at 125° in 2 hrs. The compns. could contain a tertiary amine, e.g., dimethylbenzylamine, or methylsuccinic anhydride, to catalyze the final cure. Epoxidized polybutadiene (Oxiron 2001), epoxidized

linseed oil (Epoxol 9-5), 3,4-epoxy-6-methylcyclohexylmethyl 3,4-epoxy-6-methylcyclohexanecarboxylate, resorcinol diglycidyl ether (Kopoxide 159), and bisphenol A diglydicyl ether (D.E.R. 332), were also used as the epoxy components and the use of 1,4-butanediol diglycidyl ether s-tetraphenylolethane tetraglycidyl ether, a novolak resin polyglycidyl ether, dicyclopentadiene diepoxide, or dipentene diepoxide was claimed. Methacrylic acid could be used in place of I. Other photosensitizers used included chloranil, benzil, biacetyl, 5-nitrosalicylaldehyde, and 2,4-dinitrotoluene.

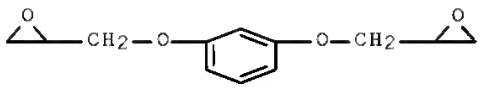
IT **25154-93-2**
(light-sensitive cement from benzoin and)

RN 25154-93-2 HCAPLUS

CN 2-Propenoic acid, polymer with 2,2'-[1,3-phenylenebis(oxymethylene)]bis[oxirane] (9CI) (CA INDEX NAME)

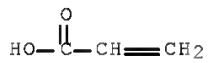
CM 1

CRN 101-90-6
CMF C12 H14 O4



CM 2

CRN 79-10-7
CMF C3 H4 O2



IC C08F; B01J
INCL 204159150
CC 36 (Plastics Manufacture and Processing)
IT **25154-93-2** 25154-94-3, preparation
(light-sensitive cement from benzoin and)

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                 SAV L10 SES898A/A
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L12        64234 SEA ABB=ON  PLU=ON  79-10-7/CRN
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L17           62 SEA ABB=ON  PLU=ON  L16 AND (1840-2003)/PRY,AY,PY
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